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Validation of Multicultural Nutrition Counseling Competencies for Registered Dietitians

Reena Oza
University of Tennessee, Knoxville

To the Graduate Council:

I am submitting herewith a thesis written by Reena Oza entitled "Validation of Multicultural Nutrition Counseling Competencies for Registered Dietitians." I have examined the final electronic copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Nutrition.

Betsy Haughton, Major Professor

We have read this thesis and recommend its acceptance:

Jean Skinner, Charles Hamilton

Accepted for the Council:
Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

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Validation of Multicultural Nutrition Counseling Competencies for Registered Dietitians

A Thesis

Presented for the

Master of Science Degree

The University of Tennessee, Knoxville

Reena Oza

May 2003

DEDICATION

I would like to dedicate this thesis to my parents, Bharat and Madhu Oza. Their love, support, and encouragement has helped me throughout my education.

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I would like to thank my major professor, Dr. Betsy Haughton, for her guidance, support, encouragement, and advice throughout my graduate career. She has been taught me more than she knows about being a good student, professional, and person. I would also like to thank my committee members, Dr. Charles Hamilton and Dr. Jean Skinner for their contributions to my education. I would like to thank Ann Reed and Cary Springer for their statistical expertise. Finally, I want to thank the Provost's Office at The University of Tennessee for providing the funding for this research through the Provost's Professional Development Award.

ABSTRACT

Objective: To validate the multicultural nutrition counseling competencies for entry-level dietitians in the next 10 years.

Design: An expert panel was asked to review the original 46 competencies and make appropriate changes. Their responses were compiled and incorporated into a survey. The survey was administered by mail and consisted of 56 competency items that subjects rated on a Likert scale of 1 to 7 (1=Somewhat essential to 7 = Absolutely essential). Following the mail survey a post card reminder was sent followed by a follow-up survey to non-respondents, another post card reminder, and a final survey to a random sample of the remaining non-respondents.

Subjects: The expert panel consisted of five members ranging in geographic location, job, and race/ethnicity. A random sample of Registered Dietitians (RDs) was obtained from the Commission on Dietetic Registration. A total of 799 surveys were mailed.

Statistical Analysis: For the demographic information, descriptive statistics, including means and frequencies, were used. The competencies were analyzed using generalized least squares factor analysis. MANOVA was used to determine if dimensions extracted differed among respondents on a variety of factors. Reliability coefficients (Cronbach's alpha) were also calculated.

Results: Of the 53.3% who responded, most were Caucasian, not Hispanic or Latino, spoke English as their primary language, had either a bachelor's, or

master's degree, worked in a clinical/acute/longterm care setting, and 50.3% provided nutrition counseling to culturally different clients. Generalized least squares extracted six factors with 40 competencies loading on them: Cultural Encounter, Culturally Appropriate Nutrition Intervention Skills, Multicultural Self-Awareness, Awareness of Social/Cultural Determinants of Health, Multicultural Knowledge of Food Practices, and Role of Culture in Communities and Agencies. There were no significant differences between RDs who were bilingual, where they lived, or what dietetic practice group membership they had. There was a significant difference between individuals who counseled more than five hours per week and those who counseled less than five hours per week. There was also a significant difference between those who had either a cultural competence course, nutrition counseling course, or both and those who had neither.

Conclusion: Multicultural competency is a requirement for every Registered Dietitian, not a luxury. By validating these competencies, agencies and organizations can implement policies to further competence in this area. RDs can also use the competencies to determine which individual skills need to be developed. This is important, as multicultural competence becomes a necessary skill for all health care professionals and the United States continues to work towards the goal of eliminating health disparities.

PREFACE

To assist the reader, the research study is divided into two parts. Part I includes an extensive literature review. Part II includes a manuscript containing introduction, methods, results, and discussion sections related to the research.

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INTRODUCTION AND LITERATURE REVIEW

INTRODUCTION

The population of the United States increased 13% between 1990-2000 and diversity of the nation increased at an even greater rate (1,2). By the year 2006, one out of every 100 individuals in the US will be from a different culture (3), leading to the projection that 47% of the population will be comprised of minority Americans by the year 2050 (4).

As the population in the United States changes, the proportion of minority Americans continues to increase. This influences how health care professionals provide care to their patients. Prior to providing care, health care professionals must understand that the cultural and health beliefs of their clients may be different from their own. Because culture plays a major role in determining health beliefs (5,6), clients may understand information differently, affecting patient compliance and satisfaction.

Health is influenced by a variety of factors including economics, agriculture, industry, environment, housing, education, and nutrition (7). Because dietary intake is essential for overall health, Registered Dietitians must be part of this health care professional population that acquires multicultural competence.

Multicultural competence is a unique category of awareness, knowledge, and skills that enables a system, agency, or professional to work effectively in cross-cultural situations (8,9). It is important for Registered Dietitians to understand why it is essential to have multicultural competence and what it can do

to enhance the profession. A model for multicultural nutrition counseling competence was developed (9) but was not validated for use in practice. The purpose of this research was to validate the existing multicultural nutrition counseling competency model (9).

LITERATURE REVIEW

Increasing Diversity of the United States

During the late 1980's and early 1990's, many immigrants began moving to a few main states in the United States (5). However, over the past few years, more and more immigrants began moving to other states, especially those with few multicultural settings, making racial and ethnic minorities among the fastest growing groups in the nation (2). It is estimated that approximately 800,000 legal immigrants enter the country yearly (10). The number of illegal immigrants that enter the country though is unknown, suggesting that the projection of minority populations may be underestimated. These increases in diversity can potentially create problems for health care providers who are more familiar with working with homogeneous populations (5).

Differences in Health Beliefs

Immigrants may come from countries with dramatically different health beliefs and practices than that of the dominant culture. This impacts both the concept and delivery of quality care (5) because ethnic identities and cultural backgrounds strongly influence health care attitudes, values, and practices (6). Thus, each culturally diverse group defines health and illness differently (5), leading to different needs and expectations of health care delivery, from both the clients' and the health care providers' perspectives (5,6). As a result, members of

some cultural groups may expect and sometimes even demand health care that is relevant to their own cultural beliefs and practices but contrary or different from that of their providers' beliefs and practices (11).

In addition to these differences, members of cultural groups adopt a cultural filter that helps them formulate health messages delivered by organizations or individual health care providers (5). This cultural filter becomes more apparent when minority patients receive health care from systems that are largely organized by and staffed with majority group members (12). If these cultural differences are ignored, barriers to effective services may emerge (13).

Until recently, Caucasian Americans primarily dominated the health care arena and defined the quality of care (5). It was according to this definition that patients felt the need to assimilate into one culture to receive quality health care (5). As a result, some cultural and racial groups have been marginalized from health care in the US (14). This degree of difference between patient expectations and care received has been used to measure both quality of care and patient compliance (5).

Sue (15) conducted studies to determine if psychological counseling should be conducted in ways that are consistent with the cultural background of clients. The results revealed that if a client were assigned to a therapist of the same ethnicity, the ethnic client took advantage of ethnic specific services. If there were a cognitive match between the therapist and client, then there were lower drop out rates from clients, better adjustment levels, and more favorable

impressions of the sessions. These results can be used to support the notion that matching one aspect of the clients' ethnicity can improve treatment outcomes and reduce health disparities that exist between minority populations and the majority population.

Reducing Health Disparities

Since President Clinton's radio address on February 21, 1998, the phrase "health disparities" became common in the literature. President Clinton identified the goal to eliminate health disparities in six areas of health status experienced by racial and ethnic minority populations while continuing the progress made in improving the overall health of American people. The six areas included infant mortality, cancer screening and management, cardiovascular disease, diabetes, HIV infection/AIDS, and immunizations. These six areas were highlighted again in a report examining national health trends from 1990-1998 (16). The report indicated that although rates for certain health status indicators improved in minority populations, rates for other health status indicators improved only slightly, remained the same, or increased.

This goal became one of the two main goals for *Healthy People 2010* (17), which sets the health policy agenda for the US. Upon review of the objectives of *Healthy People 2000*, only 16% of the target subobjectives for specific minority populations were met compared with 22% of all other objectives (2). However, more than half of the subobjectives for these populations showed a narrowing or

elimination of disparity (2). Thus, racial and ethnic disparities still exist in the US for most measures of health (18), especially for African Americans, Hispanics, American Indians and Alaska Natives, Asians, and Pacific Islanders compared to the US as a whole. Eliminating racial and ethnic health disparities will require enhanced efforts at preventing disease, promoting health, and delivering appropriate care.

Healthy People 2010

Healthy People 2010 (19) is a document developed by an alliance of hundreds of national membership organizations and government agencies from public, private, and voluntary sectors to measure progress from the years 2000 to 2010 in over 467 health objectives in 28 focus areas. It provides a comprehensive, nationwide health promotion and disease prevention agenda to bring better health to all people in the United States. This document was preceded by two similar documents (20,21) that have been updated successively.

There are 10 leading health indicators in *Healthy People 2010*, one of which is access to quality health care. The health of individuals and communities depends greatly on expanding access to quality health care, eliminating health disparities, and increasing the quality and years of healthy life. It is important to provide health care communication that is culturally and linguistically sensitive to increase use of the health care system and improve health outcomes.

Because one of the two goals of *Healthy People 2010* is to eliminate health disparities, it is characterized in this document by differences in health that occur by gender, age, race, or ethnicity, education or income, disability, geographic location, or sexual orientation. There is no one definition of health disparities and thus the following is a summary of definitions determined by a variety of professions and/or organizations:

> Health disparities are differences in the incidence, prevalence, mortality, and burden of diseases and other adverse health conditions that exist among specific population groups in the United States. The NIH Program of Action initially will focus on racial and ethnic minority populations: African Americans, Asians, Pacific Islanders, Hispanics and Latinos, Native Americans, and Native Alaskans. Research on health disparities related to socioeconomic status will also be addressed (22).
>
> Patients of different ethnic or racial groups receive different types and levels of medical care and sometimes have different outcomes and these disparities could be caused by differences in care, health-seeking behavior, insurance status, treatment preferences, variations in disease course, health status, SES, and educational status (23).
>
> Health disparities are disparities in health outcomes and significant in racial and ethnic minorities because they are more likely than others to have limited health care choices, to wait longer to seek medical care, to lack dental care, and to not have a regular source of health care. They are less satisfied with the quality of care they receive and have lower utilization rates (24).
>
> Health disparities are the driving force behind health inequality in access, utilization, and quality of medical care determined by socioeconomic status, particularly increases in income and wealth inequality (25).
>
> Those individuals and populations that experience health disparities are those that are medically underserved, underinsured, or uninsured people; those with low levels of education, rural and inner-city populations, unemployed people, or those with low SES (26).

> Racial and ethnic minorities experience disproportionate burden of morbidity and mortality across a wide range of health conditions due to reduced access to health care services, which leads to diminished utilization of preventive services and medical services (27).

For the purposes of this thesis research, the definition for health disparities was "population specific differences in the presence of disease, health outcomes, or access to health care" (28). This refers to health disparities for gender, race and ethnicity, income, education level, disability, geographic location, and sexual orientation (19).

Rapid Changes in the Health Care Environment

The gap regarding health care between the majority and minority populations in the US is widening due to several factors. In a survey conducted by the Commonwealth Fund, minority Americans did not fare as well as white Americans on a variety of factors related to health care, including effective communication between patient and physician, overcoming cultural and linguistic barriers, and access to health care and insurance coverage (29). Access to health care, which includes both preventive and rehabilitation services, has been determined to be the most important predictor of the quality of health care among racial and ethnic groups (30). One specific example of health disparities is that although African-Americans are accessing preventive services at the same rates as white Americans, their health outcomes remain worse (29). Another example is that although minority populations are on average younger than the white

population, they tend to rate their health as fair or poor more often than white Americans (29).

Some researchers have hypothesized that multicultural competence can help reduce health disparities and/or improve health outcomes of minority Americans (12). Thus, multicultural competence may be necessary to fulfill unmet needs of clients from minority populations. It may also be used as a tool by health care providers to advocate for the larger system to be more responsive to their targeted populations (31).

Why Culturally Competent Care is Important

The development of culturally competent care is essential because of the increasing diversity in the US population and decreasing access to health care due to cultural differences and language barriers of these populations (6). Working with diverse populations requires that future and present health care providers develop skills that will help them become more multiculturally competent (32). Multicultural competence involves not only an expanded knowledge base, but also a change in the attitudes, beliefs, assumptions, and practices that have been developed both professionally and personally over a lifetime. This process takes both time and commitment (5). It is recognized that knowledge of many cultures is difficult, but willingness to learn about, respect, and work with persons from different backgrounds is critical to providing culturally competent care (33).

What is Multicultural Competence?

Competence is defined as the possession of knowledge, skills, and abilities necessary to perform a specific job in the environment in accordance with the role and standards of the institution (34). Thus, competencies are "the knowledge, skills, and abilities demonstrated by organization or system members that are critical to the effective and efficient function of the organization or system...they are actions describable in behavioral terms and observable in the performance of individual or system components" (35).

Definitions of cultural competence vary from different perspectives, interests, and needs (36). These definitions continue to accumulate as more and more institutions and professions begin to incorporate cultural competence into their policies. Some examples of cultural competence definitions are as follows:

> Cultural competence includes sensitivity toward diverse groups and awareness of such factors such as immigration, stress, poverty, language barriers, myths, taboos, and spirituality that can enhance or inhibit health care practices (11).

> Cultural competence includes the attainment of knowledge, skills, and attitudes to enable administrators and practitioners within systems of care to provide effective care for diverse populations (i.e. to work within the person's values and reality) (37).

> Cultural competence is possessing the required knowledge, skills, and abilities to provide safe and effective health care, regardless of population or setting (38).

> Cultural competence involves not only an expanded knowledge base, but also a change in the attitudes, beliefs, assumptions, and practices that have been developed both professionally and personally over a lifetime (5).

> Cultural competence does not mean substituting one's own cultural identity with another, ignoring the variability within cultural groups, or knowing everything about cultures being served; instead a respect for difference, an eagerness to learn, and a willingness to accept that there are many ways of viewing the world (39).
>
> Cultural competency involves ensuring that a system (an agency, program, or individual) can function effectively in a culturally diverse setting; it involves understanding and respect for cultural differences (40).
>
> Cultural competency ensures that health care needs are identified and care is provided within the cultural context of the patient (41).
>
> Cultural competency goes beyond cultural awareness or sensitivity, it also includes knowledge and respect for different cultural perspectives and skills to use them effectively in cross-cultural situations (42).
>
> Cultural and linguistic competence is a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals that enables effective work in cross-cultural situations (43).
>
> Cultural competence is the integration and transformation of knowledge about individuals and groups of people into specific standards, policies, practices, and attitudes used in appropriate cultural settings to increase quality of services; thereby producing better outcomes (44).

The term multicultural competence is interchangeable with cultural competence. In student affairs work, it has been defined as constituting "a unique category of awareness, knowledge, and skills necessary for effective student affairs work...these competencies may assist student affairs practitioners in creating multiculturally sensitive and affirmative campuses" (8, p. 269). These definitions have some differences and some commonalities. One commonality is that cultural competence refers to both organizations and individuals. Another is that there is a continuum of competence from being monoculturally competent to

multiculturally competent. Finally, cultural competence goes beyond cultural sensitivity to implementation of certain behaviors (45).

For the purposes of this thesis research, the following definition was used because it encompasses the commonalities of all the definitions combined: Multicultural competence is a unique category of awareness, knowledge, and skills that enables a system, agency, or professional to work effectively in cross-cultural situations (8,9). Therefore, it must be present by both the therapist or health care professional and the health agency.

Organization Response to Healthy People 2010

Organizations realize that it is not enough to have a culturally competent and diverse workforce. It is also necessary to be responsive to all segments of the population. In recent years, community-based systems and hospitals began integrating their primary prevention services with tertiary prevention services (31). This is because members of the health care community are beginning to realize the economic value of catering to diverse populations to capture market share and gain access to minority consumers (31). As a result, cultural competence at the system level should be made integral to health professions training or essential to standards of professional practice (31). Communities, states, and national organizations will need to take a multidisciplinary approach to achieve health equity. Some researchers identified a new paradigm in the 21st century where health care organizations and community allies, including

academic institutions, will work together as partners to improve the health status of communities (32). *Healthy People 2010* identified empowering individuals to make informed health care decisions and promoting communitywide safety, education, and access to health care as ways to reduce and eventually eliminate health disparities.

As a result of the increasing recognition of health disparities, many federal and public agencies and organizations have responded in different ways. The following is a summary of how agencies have responded to the *Healthy People 2010* goal.

Agency Response to Healthy People 2010

Health care professionals can only become multiculturally competent with the support of the health systems in which they participate. Brach et al. (12) identified a conceptual model containing nine ways to enhance multicultural competence at the system level to reduce health disparities. These nine factors included:

1. Interpreter services
2. Recruitment and retention
3. Training
4. Coordination with traditional healers
5. Use of community health workers
6. Culturally competent health promotion
7. Inclusion of family/community
8. Immersion into another culture
9. Administrative and organizational accommodation

According to the US Public Health Services' Health Resources and Services Administration (HRSA), programs that successfully provide services that are culturally competent tend to: define culture broadly, value clients' cultural

beliefs, recognize complexity of language interpretation, facilitate learning between providers and the community, involve the community in making decisions, collaborate with other agencies, provide staff training, and institutionalize cultural competence (43).

Within HRSA, the Bureau of Primary Health Care (BPHC) established a Cultural Competency Program (28) through the National Center for Cultural Competence. The mission of the program is to demonstrate that culturally and linguistically competent practices increase access to services and reduce disparities in the health status of ethnic, racial, and cultural populations (28).

The BPHC also defined ways to contribute to a system's, institution's, or agency's ability to become more culturally competent (46):

1. Value diversity
2. Have the capacity for self-assessment
3. Be conscious of the dynamics inherent when cultures interact
4. Institutionalize cultural knowledge
5. Develop adaptations of service delivery reflecting an understanding of cultural diversity

Also within HRSA, the Maternal and Child Health Bureau (MCHB) declared a commitment to serving culturally diverse populations, assuring health care services to low income populations, and improving service delivery to women and children from culturally diverse and minority populations (47). MCHB also identified critical components of culturally competent programs which included: collection of data on cultural groups to identify gaps in services, development of clear policy statements on cultural competence, development of

specific job descriptions for staff who work with diverse populations, and training in cultural sensitivity. The agency recognized that moving towards cultural competency is a dynamic, continuous process that requires a multi-level approach over a long-term period.

The Center for Linguistic and Cultural Competence in Health Care (CLCCHC) of the US Department of Health and Human Services' (DHHS) Office of Minority Health (OMH) was mandated by Congress to develop projects focused on eliminating language barriers for limited English proficient (LEP) people for the purpose of increasing their access to health care (48). This mandate led to the development of the Culturally and Linguistically Appropriate Services in Health Care Standards, or the CLAS Standards. According to the OMH, cultural and linguistic competence is the ability of health organizations and health care practitioners to recognize different cultural beliefs, attitudes, and health practices and to use that knowledge to prescribe interventions at the systems or individual level. This can lead to improved outcomes, efficiency in health care delivery, and satisfaction of clients (48). Until this document was developed, there were no comprehensive, nationally recognized standards of cultural competence in health service delivery. It identified 14 standards with 3 central themes: Culturally competent care, language access services, and organizational supports for cultural competence. The standards are meant to correct inequities that may exist in current delivery of health services and ultimately contribute to the elimination of racial and ethnic health disparities.

Although the standards are primarily directed at organizations, individuals also can use the standards.

To assist organizations in implementing these services, the OMH developed a practical guide that will be available for use sometime in 2003. Currently the draft guide is undergoing a period for public comment and questions based on the checklists and instructions found on the OMH website (49).

State laws, regulations, and standards have emerged to guarantee that health systems respond to the increasingly diverse linguistic and cultural needs of the population (50). Standards 4 -7 of the CLAS Standards are based on Title VI of the Civil Rights Act of 1964 that requires all organizations receiving federal monies to ensure that LEP persons receive meaningful health care access through effective communication (50).

In addition, members of the House of Representatives passed a concurrent resolution in May 2002 that called for the creation of a National Minority Health and Health Disparities Month to promote educational efforts on health problems affecting minority populations (51). The resolution also called for public service announcements, data collection on health access and utilization to monitor the nation's progress toward eliminating health disparities, and dissemination of information on health disparities so health professionals can better communicate with patients (51).

The Centers for Disease Control and Prevention (CDC), a division of DHHS, recently started an initiative called REACH 2010, or racial and ethnic

approaches to community health. It is a two-phase, 5 year demonstration project. Its purpose is to help eliminate racial and ethnic disparities in health by supporting community coalitions in the design, implementation, and evaluation of unique community driven programs (52). For these programs to be effective, CDC believes that prevention research is necessary to identify the causes of health disparities and the best means of delivering preventive and clinical services. Since 1999, over 30 sites across the country have been funded throughout these various stages. Monies continue to be appropriated by Congress to continue current REACH projects and start new ones.

The National Institutes of Health (NIH), another division of DHHS, recognized its central role in eliminating persistent disparities through medical research, research training, and dissemination of scientifically sound medical information. For the fiscal year 2001, NIH allocated $20 million to establish a new Coordinating Center for Research on Health Disparities. NIH required each institute to develop its' own plan addressing disparity in the disease areas it studies (53).

Within the NIH is the Office of Behavioral and Social Sciences Research (OBSSR), which has a specific plan for developing better knowledge of the causes of racial and ethnic disparities. Currently there are several studies underway to evaluate theory-based interventions and their relationship to changing two or more health-related behaviors. The OBSSR wants to extend this research to include different racial and ethnic populations. In addition, the

OBSSR wants to increase the number of scientists who study health disparities, increase the number of minorities interested in pursuing a career in research related to health disparities, and improve health communications targeted to various racial and ethnic populations (54).

The Institute of Medicine (IOM) is a division of the National Academy of Sciences, the government agency responsible for identifying issues in medical care, research, and education. The IOM launched a 17 month study in 1999 to: assess the extent of racial and ethnic differences in health care that are not attributable to known factors; evaluate potential sources of racial and ethnic disparities in health care, including the role of bias, discrimination, and stereotyping at the individual, institutional, and health system levels; and provide recommendations directed at health providers and organizations regarding interventions to eliminate health care disparities (55). This study is sponsored by DHHS and OMH and is expected to be complete in 2002.

The IOM also established a committee on guidance for designing a national health care disparities report. The purpose of this committee is to provide guidance to the Agency for Health Care Research and Quality in writing the report on inequalities in access to health care, utilization of services, and quality of services received. A variety of factors will be taken into account to assess these disparities including: socioeconomic status, attitudes towards health, language spoken, extent of formal education, and the area or community in which the population resides (56).

Academically, the National Center for Cultural Competence is a collaborative project between the Georgetown University Child Development Center and federal government agencies. The Center's mission is to increase the capacity of health care and mental health programs to design, implement, and evaluate culturally and linguistically competent service delivery systems. The Center seeks to address health disparities through training, technical assistance, and consultation; networking, linkages, and information exchange; and product development and dissemination. The major emphases at the Center are policy development, assistance with organization self-assessment of cultural competence, and incorporation of culturally competent values, policies, structures, and practices within organizations (57).

New Resources on Cultural Competency

In addition to these organizations, many collaborations/partnerships have been built to expand the cause of reducing disparities through multicultural competence. For example, the Center for Cross Cultural Health (CCCH) is an independent non-profit organization for health care providers in Minnesota. This organization wants to help health care providers integrate the role of culture in improving health through education and training (58).

The National Multicultural Institute is a private, non-profit organization that wants to help strengthen and empower societies using diversity as a way to bring individuals, organizations, and communities together. The Institute

documents cutting edge learning in the field and provides resources to individuals, organizations, and communities looking to pursue cultural competence (59).

One resource that organizations in particular can use is *The Provider's Guide to Quality and Care* (60). This is a resource meant to help organizations provide culturally competent services to diverse populations. It is provided by the Manager's Electronic Resource Center, a division of Management Sciences for Health, a non-profit organization working to strengthen health programs worldwide and improve global health (61).

Similarly, the OMH Pocket Guide to Minority Health Resources is a book that lists several types of resources for organizations to use to enhance cultural competence. These resources include federal health resources, national minority health organizations, state minority health liaisons, and colleges and universities with cultural competence programs (62).

The website www.diversityrx.org (63) is organized to provide information on how organizations can meet the language and cultural needs of minority populations seeking health care. The website is sponsored by The National Conference of State Legislatures, Resources for Cross Cultural Health Care, and the Henry J. Kaiser Family Foundation. The website contains models and practices, policies, legal issues, and research links to help organizations become more culturally competent. One of the emerging priority areas on the website is the need for standardized curriculum elements or evaluative measures for content and/or quality of cultural competence programs or classes offered at different

organizations. In addition, there is a need for incentives for health professionals to participate in these programs or classes. Finally, the website contains information on state policies already in place for providing culturally and linguistically appropriate services as defined by the OMH.

Yet another resource is the text entitled *Health Departments Take Action: A Compendium of State and Local Models Addressing Racial and Ethnic Disparities in Health* (64). This book contains model programs that have been implemented around the country to reduce health disparities and that other state health departments can use in their own communities. It also contains a list of federal and national programs that address racial/ethnic health disparities.

As more and more public, private, and federal agencies and organizations recognize the *Healthy People 2010* goal to eliminate health disparities, multicultural competence initiatives at the organizational level continue to increase. In addition, these organizations and agencies recognize that organizational multicultural competence alone is inadequate. They also need members of the workforce to be multiculturally competent.

Workforce Competence

According to the 1988 IOM report on the status of public health (65), a more efficient and scientifically sound system of practitioner and leadership development is essential to serve society effectively. Leadership programs benefit from the use of defined competencies because through their use, leadership

capacity is sustained (66). Different agencies have responded to these competency issues in different ways and included cultural competence in their discussions.

The CDC along with the Agency for Toxic Substances and Disease Registry (ATSDR) developed an initiative in conjunction with local and state health departments, national public health organizations, academic institutions, and HRSA. The purpose of the initiative was to build technical competence and ensure public health workforce competence for the 21st century (67). This initiative identified eight draft core public health competencies, one of which was cultural competency skills. Within this skill, there are five separate competencies related to cultural competency, including:

- Understand factors contributing to cultural diversity
- Learn appropriate interaction methods with people of diverse backgrounds
- Identify the role of cultural, social, and behavioral factors in the delivery of services; develop and adapt culturally appropriate approaches to service
- Understand the importance of a diverse public health workforce.

In addition to these competencies, one of the four recommendations for a skilled public health workforce was to ensure that all public health practitioners are competent in the culture(s) and language(s) of the people they serve (68).

Healthy People 2010 indicates that the issue of cultural and linguistic differences must be addressed to assure competence within a diverse public health workforce. There is significant underrepresentation of minorities in the health

professions, which may be one reason for the health disparities that exist in minority groups (39). Specifically, underrepresented racial or ethnic minority groups comprise only 10% of health professionals even though they comprise 25% of the US population (19). Minority groups not only are underrepresented in the health professions, but also are the ones that tend to be less healthy, experience greater barriers to accessing health care, and often receive lower quality health care (69). Minority providers are more likely to serve individuals of their own racial and ethnic backgrounds (69). Thus, one of the objectives of *Healthy People 2010* is to increase the proportion of all degrees awarded to members of these populations in all health professions, allied and associated health professions, and the nursing field.

Healthy People 2000 had an objective to increase the number of counties with programs for racial/ethnic groups. However, progress towards this goal was difficult to evaluate because of lack of data (2). Healthy People 2010 also has included this objective and highlighted it as a very important objective not only to implement, but also to evaluate.

In conjunction with agency competence, workforce competence must be expanded to include both culture and health systems. As a result of the recognized importance of workforce competence, several professional organizations have issued statements and/or initiatives to help their members become more culturally competent.

Professional Organization Response to Healthy People 2010

The American Medical Association (AMA) signed a memorandum of understanding with the US Surgeon General and the Department of Health and Human Services (HHS) to address the shared goals of *Healthy People 2010*, including that of eliminating health disparities (23). The AMA recognizes that racial and ethnic disparities in health affect public health safety and that engaging the health care community is necessary to make progress toward solving the problem. The AMA website has a comprehensive list of resources on health disparities and cultural competence for other health professionals, including physician assistants, dental hygienists, occupational therapists, radiologic technologists, and social workers (23).

According to the American Academy of Pediatrics (AAP), culturally effective pediatric health care is the delivery of care through appropriate physician knowledge, understanding, and appreciation of cultural distinctions. This understanding should include the beliefs, values, actions, customs, and unique health care needs of different population groups. Providers then can enhance interpersonal and communication skills, and strengthen the physician-patient relationship to maximize the health status of patients (70). The Academy has identified two general recommendations. The first is to develop and to evaluate curricular programs in medical schools and residency programs to enhance the provision of culturally effective health care. The second is to develop

continuing medical education credits for pediatricians with the goal of increasing culturally effective health care.

The American Psychological Association (APA) developed guidelines for providers of psychological services to ethnically, linguistically, and culturally diverse populations (71). These principles are intended to be general in nature and are designed to provide suggestions for psychologists working with minority populations.

The American Public Health Association (APHA) released a call to the nation to eliminate racial and ethnic disparities in health. This call emphasizes the need for combined efforts of all sectors and disciplines of society: public and private sectors, business and labor, non-profit and community-based organizations, educational institutions, the faith community, and others to help eliminate racial and ethnic health disparities (72). The APHA is calling for the creation of a national coalition with an inclusive, diverse membership to develop and implement a national strategy. The current steering committee includes individuals from a variety of national, regional, and local positions and from a variety of sectors.

Cultural competence must occur at the level of local, state, and federal health care agencies and within private and voluntary sectors. Cultural competence also must extend to the individual provider to achieve broad based cultural inclusion (73). With the support of agencies for which they work, health

care providers can advance their levels of individual competence more effectively.

Professional Competence

The identification of competencies is important for any discipline to define individual performance expectations (74). Competencies can be identified in two ways: retrospectively through studies of practices and practitioners who are exemplars in the field of interest or prospectively by looking at an emerging area of practice and defining the competencies that will be needed to deliver the desired services (74). Several studies on individual competence have been conducted in professions, such as counseling, psychology, and nursing. The purpose of these studies has been to identify competencies for professionals to use in their own settings.

One study (75) developed competencies for hospital nurses by looking at the standards of nursing practice defined by the College of Nurses. A panel of experts in the field were asked to evaluate each item and allocate categories into which each item should be placed. Another study (76) used final year nursing students to determine a list of competencies for the successful nurse practitioner. This list was assessed by a panel of judges for accuracy using comments and suggestions for refinement. Another set of competencies for the nursing profession was developed using a literature review and focus groups (77). The

researchers then used a modified Delphi technique of expert reviewers from the profession to revise the competencies (77).

Beebe (78) identified competencies by reviewing literature in the field of speech communication. The information collected was used to create a list of competencies using a consensus of group participants.

Gibson and Soanes (79) used a nominal group technique to develop a set of competencies for pediatric oncology nurses. This process generated a list of potential competencies, which were refined by nurses in academia and followed by consultation with nurses in the field to ensure proper representation of the population. Sports medicine competencies in another study were evaluated for content using "content experts" (80).

One study (74) used a three-round Delphi survey to identify competencies for emergency preparedness. Participant expertise was based on background, organization of employment, and location. Participants were asked to rate the importance of each competency on a Likert-type scale. The competencies these individuals created then were assessed in a second round by six focus groups comprised of representatives from the field of study. This project demonstrated that it is possible to develop a useful and acceptable set of competencies in an emerging area of practice using this process. The 3-stage process used in this study was:

1. Drafting potential competencies using literature and experts
2. Validating and expanding the draft list using a Delphi panel of experts

3. Further validating and clarifying the proposed competencies with representatives from the agencies where these types of employees work

Dodds and Polhaums (81) established construct validity of a set of competencies for advanced public health nutritionists by surveying public health nutrition practitioners in the field. These individuals were asked to determine what competencies needed to be added or deleted from the list of competencies provided.

Yet another list of competencies for public health professionals was developed and validated by professionals in the public health field using a public comment period through e-mail, focus groups, sessions at various conferences, and the Internet. The results of the comment period created a consensus set of core competencies that represent a broad array of disciplines and practice settings (67).

For multicultural competence in particular, Sue et al (82) began the research by attempting to identify cross-cultural counseling competencies. They proposed a model based on beliefs and attitudes, knowledge, and skills. This was followed by other efforts to modify and refine this model (83).

Cultural competence also has been identified on an individual level as a developmental process that occurs along a continuum of six steps: cultural destructiveness, cultural incapacity, cultural blindness, cultural pre-competence, cultural competence, and cultural proficiency (42). Because cultural competence is perceived as a developmental process, the goal of assessment of competence is

not to tell people where they are on a scale, but rather to inform them of where skill enhancement is necessary (13). This continuum was adapted for use in the nursing profession and was refined for use in further research studies in nursing cultural competence (84).

Clinicians need to be culturally competent to recognize the importance of not only obvious cultural differences, such as language, dress, and diet, but also more subtle cultural differences, such as patient perceptions of health, illness, and appropriate approaches to treatment (85). Things such as bias, stereotyping, prejudice, and clinical uncertainty on the part of the healthcare provider may contribute to racial and ethnic disparities in health care (30).

In a review of four instruments to assess multicultural counseling competence (86), three of the four models were validated using experts in the field. Thus, a common theme in the identification of competencies in these studies and others is the consultation of a professional group, whether it is experts or practitioners in the field (79). This is important to note because the use of experts helps to establish content and construct validity of the competencies.

American Dietetic Association

The mission of the American Dietetic Association (ADA) is "to serve the public through the promotion of optimal nutrition, health, and well-being…it starts with the individual dietetics professional who has a responsibility to provide quality services to his/her clients" (87). This mission is supported by the ADA's

Standards of Professional Practice. These are statements to describe the minimum expectations in providing nutrition services to the public (87). In addition, ADA uses a competency-based model for practice, but has not developed multicultural nutrition counseling competencies to the same extent as the counseling and psychology professions (9).

The ADA has incorporated multicultural competence into policymaking and administration and plans to incorporate diversity-related activities to prepare members to accomplish goals successfully (88). This incorporation coincides with perceived needs of nutrition professionals in the field. One study on future training needs of public health nutritionists identified that one need was "greater cultural sensitivity and skills to develop culturally relevant programs and services..." (89, p. 283).

The ADA has established networking groups, which are racially/ethnically based, in addition to the dietetic practice groups, which are subject based. There are eight networking groups formed by ADA members who network and exchange information related to common ethnic and/or religious interests. These informal groups develop their own mechanisms for decision-making, communications, projects and funding (90).

Registered Dietitians will be challenged with new issues concerning how to deliver culturally appropriate nutrition counseling to diverse populations because of the continuous increase in minority American populations (91). Before counseling and communication skills are fully understood by dietitians,

multicultural skills must be developed (92) through the use of multicultural competencies.

Multicultural Competence for Nutrition and Dietetics

Nutrition is essential for growth, development, overall health, and well being (4). Dietary factors related to nutrition contribute to the burden of preventable diseases and premature deaths in the United States (93, 94). Coronary heart disease, some types of cancer, stroke, and type 2 diabetes comprise four of the leading causes of death, all of which are affected by dietary factors (95). The number of people that are overweight or obese has significantly increased, which increases risk for high blood pressure, type 2 diabetes, coronary heart disease, stroke, gallbladder disease, osteoarthritis, sleep apnea, respiratory problems, and some types of cancer (2). Disparities in these diseases are evident in different population subgroups based on age, gender, race and ethnicity, and income (2). Because of these differences in nutrition related diseases, nutrition professionals need to realize that people from different racial or ethnic backgrounds require different treatment methods.

In response to the Healthy People 2010 workforce objective to increase the proportion of degrees awarded to minorities in all health professions, HRSA developed a document titled *The Key Ingredient of the National Prevention Agenda: Workforce Development* (96). It is based on the notion that health practitioners from underrepresented minority groups can improve access to health

care services. It enumerates the number of minority health care professionals for each health care profession. By knowing the composition of a workforce, future needs, such as continuing education and academic training, can be identified (97). In addition, professional shortages can be forecast as a means to help reduce health disparities and ensure access to services (97). A summary of minority representation among Registered Dietitians is shown in Table 1.

The American Dietetic Association set a goal to increase diversity of students from 20% in 1998 to 25% by 2004 as a basis of a more diverse workforce and curricula (98). To meet this goal, the ADA received funding from HRSA to develop a national mentoring program to encourage members of minority groups to pursue careers in nutrition science and dietetics. The overall goal of this program is "to improve the quality of health care and the accessibility of nutrition services within the culturally diverse populations that ADA and all health professionals serve" (98, p. 1001). This goal will be accomplished in two

Table 1. Minority Representation Among Registered Dietitians in the United States, 1999-2000

% of Total Population	Race/Ethnicity	% of Dietitians
72.0	Caucasian	90.0[1]
11.8	Hispanic or Latino	2.0
12.2	Black or African-American	2.4
0.7	American Indian/Alaska Native	0.2
3.9	Asian/Pacific Islander	5.4

[1] Calculated based on other reported percentages
(Percent total population from Current Population Survey data from 1999 and 2000 [Bureau of Labor Statistics] Census Bureau)

ways. The first is by assisting directors and faculty of college dietetics education programs accredited or approved by the Commission on Accreditation for Dietetics Education to develop and implement minority mentoring programs in pre-professional programs. The second is by assisting ADA members in their state affiliates, dietetic practice groups, and minority networking groups in creating community outreach programs to reach children and young adults and to interest them in careers in dietetics (98). The program outlines goals, outcomes, and measures for different age groups that ultimately can be shared with other professions.

Individual competence can relate to a variety of skills. However, to impact lifestyle behaviors and more specifically nutrition related health disparities, multicultural nutrition counseling competence is necessary.

Multicultural Competency in Counseling

According to Pederson (99), multicultural counseling is the most important new idea to shape the field of counseling in the 21st century. As mentioned earlier, professions such as counseling, psychology, and nursing have researched multicultural competence for decades, but still have not reached the point where all members of the professions have achieved the desired levels of cultural awareness, knowledge, and skill. Increased awareness of cultural differences, knowledge about cultural groups, and sensitivity is not enough to constitute cultural competence until practical strategies for individualizing care

are implemented (5). Cross-cultural counseling was identified as a rising issue in the 1980's and early 1990's, specifically for dietitians and diet counseling (100). Although the profession of nutrition and dietetics has identified multicultural counseling competence as a need, it is slowly working toward finding a way to incorporate it into practice.

Nutrition Counseling as a Way to Impact Behavior

Eating patterns can be improved by effective counseling strategies. By providing guidance to individuals on what they actually eat versus what is recommended for the general population (101), behavior change might be more successful. Nutrition is often closely related to religious beliefs, which is often a barrier to health care (101). In addition, culturally defined variables, such as nutrition related to religion, are factors in behavioral change program design and implementation (102). Successful diet counseling is concurrent with culturally sensitive communication strategies (103). More specifically, the chances for patient compliance increase when the health care provider is aware of personal cultural assumptions, the client's cultural heritage, and specific food influences on the client's food habits (100). Nutrition education should begin with recognition of diverse food habits and beliefs, but this is difficult due to the lack of representation of ethnic groups in the workforce (98).

Model for Multicultural Nutrition Counseling Competencies

A model for multicultural nutrition counseling competencies for Registered Dietitians was developed (9) based on the work of research conducted in psychology (83, 86). The nutrition model is similar to other models proposed by researchers in different fields, but the competencies within this model are specific to dietetics practice. Multicultural nutrition counseling "involves a nutrition professional and a client from a different culture" (91, p. 57). The problem arises when the person delivering the care is from the mainstream culture, or the culture that created the concept of quality of care (5). Equal care cannot be defined as the same care in a culturally diverse society, because care that is considered appropriate for one patient may not be for the next patient (5).

The multicultural counseling competencies were developed based on a literature review of other models (8, 83, 84,104). These competencies were tailored to include the work of nutrition professionals. Over 600 members of the ADA Public Health/Community Nutrition dietetic practice group, directors of didactic programs in dietetics, and directors of dietetic internship programs were surveyed in 1999 to determine what competencies they believed were essential for Registered Dietitians (RDs). A seven point Likert scale (1 = Unessential to 7 = Essential) was used to delineate how essential each competency would be in the next ten years for entry level RDs.

The multicultural nutrition counseling competency model (9) contains three factors: multicultural nutrition counseling skills, multicultural awareness,

and multicultural food and nutrition counseling knowledge, with a total of 28 competencies (Figure 1, Appendix A). The first and third factors are unique to dietetics because cultural food practices and traditions can significantly impact delivery of health care services.

Importance of Validity

Validity determines the confidence professionals can place in the findings of a survey and helps interpret survey results within the context of a specific practice. Thus, it is necessary to establish an instrument's validity (105). It is important to measure knowledge with a scale of known validity to ensure it is measuring what it claims to measure (106). It also is essential for a competency model to demonstrate validity of the model's standards to ensure it identifies the

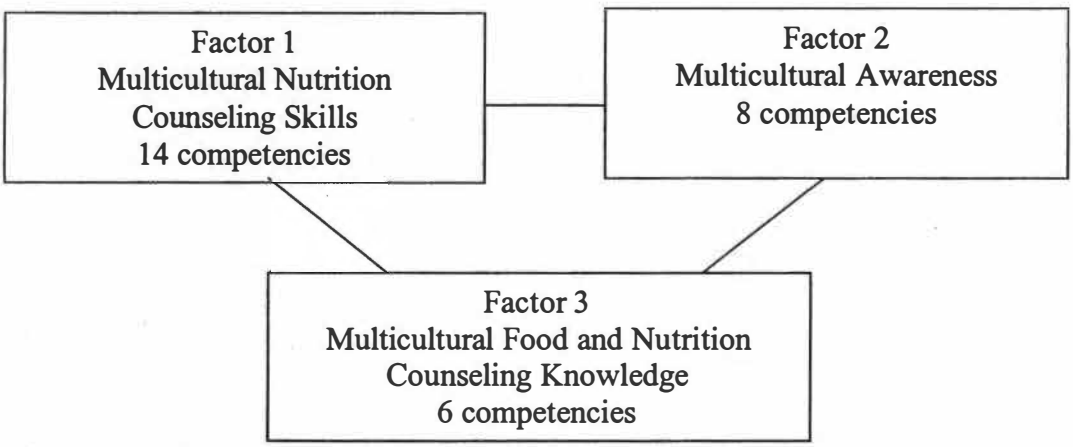

Figure 1.
Multicultural Nutrition Counseling Competency Model for Registered Dietitians (9)

characteristics of an effective employee compared with an ineffective one in given situations (107).

Content Validity

Content validity is a subjective measure of appropriateness of items as determined by a set of reviewers who have some knowledge of the subject matter (108). It is measured through an organized review of survey contents to ensure inclusion of all necessary components (108). This measure is not quantified as a statistic; instead it is presented as an overall opinion of a group of trained judges. As a result, accuracy is difficult to measure, but it is a good foundation upon which to build another assessment (108). By analyzing content validity, the appropriateness of the items can be determined and further studies, such as self-assessment and implications on education and training, can be completed. Content validity is essential because if the competencies do not include a representative sample of items of the whole domain being measured, then there will not be an accurate assessment of knowledge (106).

Construct Validity

Construct validity measures whether survey responses provide a good measure of a specific concept or construct that represents ideas to describe or explain a behavior (109). Construct validity increases with each successful use of

the instrument (106). One proposed way to test construct validity is to survey two groups, one of which is known to have knowledge on the subject and the other of which is known to have little knowledge on the subject (106). The survey results from both should be different in that the experts should score higher on the subject matter. A similar but modified method was used by Gebbie et al (74). In this study, experts in a specific field were consulted in the first phase to validate competencies, while in the second phase practitioners in the field were used. The results were compared to verify that both experts and practitioners agreed on a list of competencies, thus validating them.

Face validity of the multicultural nutrition counseling competency model (9) was established by five Registered Dietitians with two or more years of nutrition counseling experience. They were asked to review the competencies and resulting survey in relation to the proposed model for content and question clarity. The survey instrument then was pilot tested twice with 30 members of the local dietetic association. Both of these processes allowed for refinement of the survey instrument for more accurate results.

However, before the competencies can be used in practice it is important to establish other types of validity, namely content and construct validity. These are necessary to make the instrument not only more accurate, but also more representative of the profession. The model was developed initially (9) using three different population groups as a sample to identify which competencies form the model. Of the population groups surveyed, one represented public

health nutrition practitioners, one represented dietetic educators, and one represented dietetic internship directors. These groups, however, did not represent all Registered Dietitians. By surveying a larger representative sample of the population of all Registered Dietitians, this research can be extended to test the model's construct validity (106).

In the Harris-Davis study exploratory principal component analysis was used to analyze the dimensionality of the competencies (9). This helped determine whether competencies could be explained by a small number of factors that accounted for most of the variance and had a causal influence (9). The analysis demonstrated how competencies were correlated together and loaded on factors. Only competencies with loading values greater than 0.400 were accepted into the model (9). To determine the optimal number of factors to extract, scree plot and factor interpretability were used.

Research questions

No known studies have been conducted to test the validity of any competencies related to multicultural nutrition counseling. By consulting experts in the field and expanding the population to include all Registered Dietitians, content and construct validity, respectively, can be established. Since the profession is just beginning to develop standards on this topic, establishing validity of the competencies for future use may develop a more complete picture

of what competencies nutrition professionals must possess to work in multicultural settings. Thus, the purpose of this study was to test:

- Content validity of the competencies by using an expert panel;
- Construct validity of the competencies by analyzing differences within the sample between:
    - Those who conduct counseling and those who do not;
        - Those who counsel culturally different clients five or fewer hours/week and those who counsel culturally different clients more than 5 hours/week;
    - Those who are bilingual and those who are not; and
    - Those who live in culturally diverse geographic areas and those who do not.

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PART II

SIX COMPONENTS FOR THE VALIDATED MULTICULTURAL NUTRITION COUNSELING COMPETENCY MODEL

INTRODUCTION

The population of the United States increased 13% between 1990-2000 and diversity of the nation increased at an even greater rate (1,2). As the population in the United States changes, the proportion of minority Americans continues to increase. This influences how health care professionals provide care to their patients. Federal agencies and professional organizations started efforts to become more multiculturally competent at the organization level and at the individual level for several reasons. Among these is that one of the two goals for Healthy People 2010 is to eliminate health disparities (3). To achieve this goal, enhanced efforts at preventing disease, promoting health, and delivering appropriate care are necessary. By becoming more multiculturally competent, organizations and individuals can help begin the process to achieve this goal. Multicultural competence is defined as a unique category of awareness, knowledge, and skill that enables a system, agency, or professional to work effectively in cross-cultural situations (4,5).

Because dietary intake is essential for overall health, Registered Dietitians must be part of this health care professional population that acquires multicultural competence. Counseling is one intervention mode used by Registered Dietitians to promote behavior change and, ultimately, improved health. Multicultural nutrition counseling "involves a nutrition professional and a client from a different culture" (6, p. 57). Problems can arise when the person delivering the

care is from the mainstream culture, or the culture that created the concept of quality of care (7). Equal care cannot be defined as the same care in a culturally diverse society, because care that is considered appropriate for one patient may not be for the next patient (7). Therefore, a model (5) for multicultural nutrition counseling competence was proposed recently, but was not validated for use in practice.

Model for Multicultural Nutrition Counseling Competencies

The model for multicultural nutrition counseling competence for Registered Dietitians was developed based on a literature review of other models, including those in psychology (4, 8, 9, 10). The model was tested with members of an American Dietetic Association dietetic practice group with a special interest in public health and community nutrition. The resulting model is similar to models from other disciplines, but its competencies are specific to dietetics practice.

The multicultural nutrition counseling competency model contains three factors: multicultural nutrition counseling skills, multicultural awareness, and multicultural food and nutrition counseling knowledge, with a total of 28 competencies (Figure 1). The first and third factors are unique to dietetics because cultural food practices and traditions can significantly impact delivery of health care services.

The purpose of this study was to validate the proposed multicultural nutrition counseling competencies. This was done in two phases to test content validity from an expert panel and construct validity from a broader sample population than used to determine the original competencies. This will validate the model beyond what was done in the original study (5) and broaden the model's application. The rationale for using this two phase process was that this method has been identified as a method for validation of competencies in an emerging area (11). Prior to beginning the research, human subject approval was acquired through the University's institutional review board.

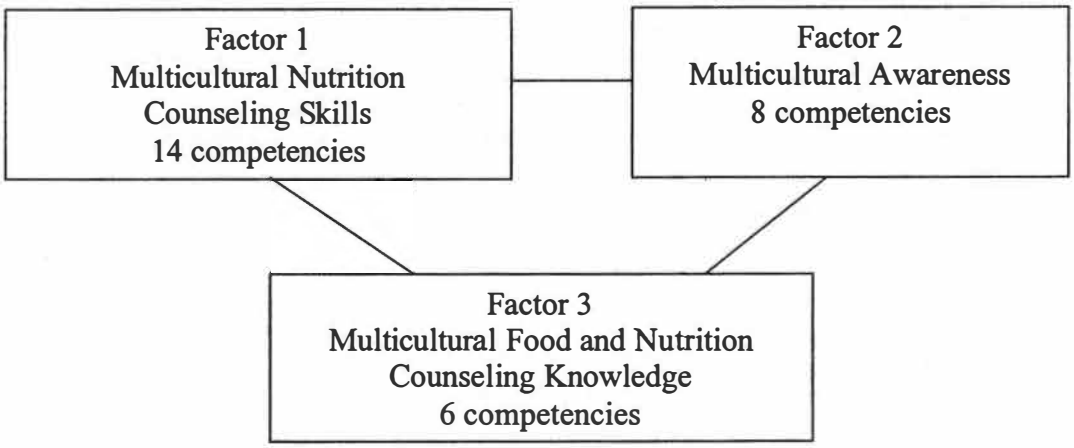

Figure 1.
Multicultural Nutrition Counseling Competency Model for Registered Dietitians (5)

METHODS

Phase One

In Phase One an expert panel was convened to review the model for content validity through a telephone conference call. Participants were Registered Dietitians from different ethnic and racial backgrounds. Specifically, four members were non-Caucasian and one was Caucasian. They were employed in a variety of private and public sectors in five culturally diverse geographic areas of the United States. Panel members were chosen because of their role as key leaders in the field of nutrition practice, and their specific expertise and interest in multicultural nutrition counseling.

After accepting invitations to participate (Appendix B), 5 panel members were sent a packet of information including expectations of their role and relevant articles to review prior to the conference call (Appendix C). The packet also included the original 46 competencies developed by Harris-Davis (5). They were asked to make recommendations for revision of these 46 competencies, including deletion, revision, or addition of competencies. Their responses were compiled for use during the conference call. After the conference call, the researcher compiled the results and sent them to each panel member for final review and comment.

Phase Two

Phase Two tested the model's construct validity. This was accomplished by a mail survey of Registered Dietitians identified randomly from the Commission on Dietetic Registration (CDR), the credentialing agency of the American Dietetic Association.

Subject Selection

Dietitians (n = 799) were randomly selected from among those registered with the Commission on Dietetic Registration (CDR) to complete a survey. There are approximately 69,000 Registered Dietitians in CDR and a 50-60% response rate was projected based on previous research with similar groups (5). To be 95% confident that the sample reflected the population, 799 subjects were selected (12).

Instrument

The survey instrument was pilot-tested with 17 Registered Dietitians in the local area, who were eliminated from the final sample. The instrument was revised accordingly and consisted of two sections (Appendix D). The first section contained 17 forced choice questions about demographics, including race/ethnicity, primary and secondary language, duration of career in nutrition and dietetics, level of education, primary and secondary work positions, if/how much

nutrition counseling the respondent provided to culturally different clients, Dietetic Practice Group (DPGs) affiliations, and region of the country where the Registered Dietitian lived.

The states were divided into four regions based on areas with minority population averages higher than the national average (1), with a minimum of 7 states used to constitute one region. States were mutually exclusive; therefore, if a state had 2 minority populations higher than the national average, the state was assigned to a region based on the minority population with the higher percentage. Region A contained states with individual state averages for Caucasian Americans higher than the national average. Similarly, Region B contained states with proportionally more American Indians and Alaska Natives, Region C contained states with proportionally more African Americans, and Region D contained states with proportionally more Asian, Hispanic or Latino, Native Hawaiian, and other Pacific Islanders than the United States as a whole. Region D contained multiple minority groups, because there were not 7 states where the proportional representation of any one of the minority groups was higher than the national average.

DPG affiliations were asked because the researchers were particularly interested in membership in specific DPGs. It was assumed that members in any one of these seven DPGs would likely be interested in or affected by counseling, multicultural issues, and lifestyle interventions. These DPGs were: Diabetes Care and Education; Dietitians in General Clinical Practice; Gerontological

Nutritionists; Pediatric Nutrition; Public Health/Community Nutrition; Sports, Cardiovascular and Wellness Nutritionists; and Women and Reproductive Nutrition. This allowed for comparison of these specific groups to those without memberships in these groups.

The second section asked respondents to rate the essentiality of each proposed multicultural nutrition counseling competency for entry-level Registered Dietitians in the next 10 years using a seven point Likert-like scale (1 = Somewhat essential, 3 = Moderately essential, 5 = Very essential, and 7 = Absolutely essential). Essential was defined as a leading principle necessary for entry-level practice as a Registered Dietitian over the next 10 years (13).

Survey Implementation

The survey methodology was modified from Dillman's method (14) to include a mailed questionnaire with cover letter and postage-paid return envelope, postcard reminder within 1 week of mailing the initial survey, and follow-up with non-respondents 3 weeks after the initial mailing (Appendix E). The follow-up included a second questionnaire, cover letter and postage-paid return envelope. Due to the low response rate (41%) after the follow-up survey with non-respondents, a second postcard reminder was mailed to all non-respondents two weeks later. This was followed two more weeks later by a third mailing of surveys, cover letter, and postage-paid return envelope to a random sample of half of the remaining non-respondents (n = 205) (15).

Data Analysis

Survey responses were computer entered and verified with double entry. Data were analyzed using SPSS (SPSS for Windows Version 11.0, 2002, Chicago, IL) and appropriate statistical techniques, using consultation provided by University statisticians. Statistical analyses included frequencies for descriptive statistics and Generalized Least Squares (GLS) factor analysis for construct validity and analysis of the dimensions encompassed by the competencies. Only competencies with loading values greater than 0.500 were accepted. Reliability coefficients (Cronbach's alpha) were calculated to determine the internal consistency of competency items and competency reliability. The purpose of this was to test the homogeneity of the entire scale by assessing how groups of competencies measure different aspects of the same construct (16). Once the factors were identified, the competencies were reviewed and named based on a common theme.

From the data obtained from the survey, MANOVA analysis was used to determine if ratings among respondents differed in four ways. Specifically, comparisons for responses that determined the competency factors were made for:

- Those who counseled and those who did not;
- Those who were bilingual and those who were not;
- Those that belonged to Dietetic Practice Groups with assumed special interest and those who did not;

- Those who lived in culturally diverse geographic areas compared to others; and among those who did counsel; and
- Those who counseled culturally different clients five or fewer hours per week and more than five hours per week.

A significance level of $P \leq 0.10$ was chosen because when using MANOVA, it is necessary to anticipate the use of follow-up tests, which results in a decrease of acceptance level for each subsequent test. By choosing a more liberal significance level for the MANOVA, the researcher can prevent the P value from getting so small that comparisons that may be marginally significant are not detected.

RESULTS

Expert Panel

Five panel members participated by mail and e-mail and only 4 participated in the conference call. The researcher reviewed each competency where a recommendation had been made prior to the conference call and asked for discussion until consensus was reached among the panel members. Consensus recommendations were to delete 3 competencies, revise 27 competencies, and add 13 competencies for a new total of 56 competencies.

Demographic Characteristics

The response rate for the first mailout was 28.5%. In the first contact with nonrespondents, the response rate was 16.9%, and for the second contact with nonrespondents the response rate was 13.7%. Of the 799 subjects surveyed, 13 surveys were returned for bad addresses leading to an overall response rate of 53.3% (n=398). All respondents met the selection criteria as Registered Dietitians. The majority of respondents were Caucasian (92.7%), not Hispanic or Latino (97.5%), and responded with English as their primary language (98.5%). Most respondents either had a Bachelor's (47.2%) or a Master's (46.7%) degree. Most (34.5%) worked in a clinical/acute/longterm care facility and 50.3% counseled culturally different clients. Of this latter group, 62.7% counseled clients five or fewer hours per week and 37.3% counseled clients more than five hours per week. On average, all respondents had 20.1 years of nutrition and dietetic experience and those who counseled culturally different clients had done so for 14.7 years (Table 2 and Table 3).

Multicultural Nutrition Counseling Factors

Six factors accounting for 61.0% of the total variance were extracted with a total of 40 competencies loading on these factors (Figure 2 and Table 4). Eigenvalues for each factor were 25.1, 3.2, 2.4, 2.1, 1.5, and 1.3 and percent

Table 2 Characteristics of Respondents

Characteristics	Respondents (n=398)[a]	
	No.	%
Regions where respondents live		
Region A[1] (CT, IL, IN, MA, ME, MI, NH, OH, PA, RI, VT, WI)	124	31.6
Region B[2] (IA, KS, MN, MO, ND, NE, SD)	36	9.2
Region C[3] (AL, AR, DC, DE, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV)	116	29.5
Region D[4] (AK, AZ, CA, CO, HI, ID, MT, NJ, NM, NY, NV, OR, UT, WA, WY)	117	29.8
Ethnicity		
Not Hispanic or Latino	388	98.5
Hispanic or Latino	6	1.5
Race		
Caucasian/White	366	92.7
Asian	17	4.3
African American/Black	7	1.8
2 or more races	3	0.8
Some other race	2	0.5
Education		
Bachelor	187	47.2
Master	185	46.7
Doctoral	23	5.8

Table 2. Continued	Respondents No.	(n=398) %
Associate	1	0.3
Primary Work		
Clinical/Acute and/or Long-term care facility	99	34.5
Ambulatory/Outpatient clinic or office	43	15.0
Community/Public health facility or organization	39	13.6
Administration/Food service operation	29	10.1
Private practice/Self-employed	29	10.1
Other	25	8.7
College/University	23	8.0
Nutrition Counseling		
No	75	26.2
Yes	211	73.8
Nutrition Counseling to Culturally Different Clients		
Less than or equal to 5 hours/week	126	62.7
More than 5 hours/week	75	37.3
Training History		
Nutrition counseling continuing education program, workshop, or class	145	37.6
None	111	28.8
Both	108	28.0
Cultural competence continuing education program, workshop, or class	22	5.7

Table 2. Continued

[1]Population proportion greater than national average for Caucasians; [2]American Indian and Alaska Native; [3]African American; [4]Asian, Hawaiian and Other Pacific Islander, Hispanic or Latino

[a] Varies from total because some respondents did not complete the ratings for all items

Table 3 Selected ADA Dietetic Practice Group Membership of Respondents

Percent of All Respondents

Characteristics	Respondents (n = 398)	
	No.	%
Sports, Cardiovascular, and Wellness Nutritionists	57	14.3
Diabetes Care and Education	56	14.1
Gerontological Nutritionists	29	7.3
Public Health/Community Nutrition	23	5.8
Pediatric Nutrition	21	5.3
Dietitians in General Practice	19	4.8
Woman and Reproductive Nutrition	2	0.5
Total	207	

variances were 12.9%, 11.9%, 9.7%, 9.1%, 8.8%, 8.3%, respectively. Mean factor scores were calculated on each factor for interpretability. There was no difference by ethnicity, race, whether or not respondents counseled culturally different clients, lived in culturally diverse geographic areas, were bilingual, or belonged to specific practice groups.

Findings from the data analysis using mean factor scores indicated a significant difference (P –value = 0.068) between Registered Dietitians who counseled clients five or fewer hours per week and those who counseled clients more than five hours per week. Those who counseled culturally different clients more than five hours per week scored higher on all factors except factor 2. Mean factor scores also indicated that Registered Dietitians who had some type of cultural competence and/or nutrition counseling class scored significantly higher on the first 3 factors (P-value = 0.016). Cronbach's alpha, or reliability coefficients, ranged from 0.86 to 0.92.

The number of competencies that loaded on each of the 6 factors ranged from 5 to 10. The factors were named: Cultural Encounter, Culturally Appropriate Nutrition Intervention Skills, Multicultural Self-Awareness, Awareness of Social/Cultural Determinants of Health, Multicultural Knowledge of Food Practices, and Role of Culture in Communities and Agencies (Figure 2 and Table 4).

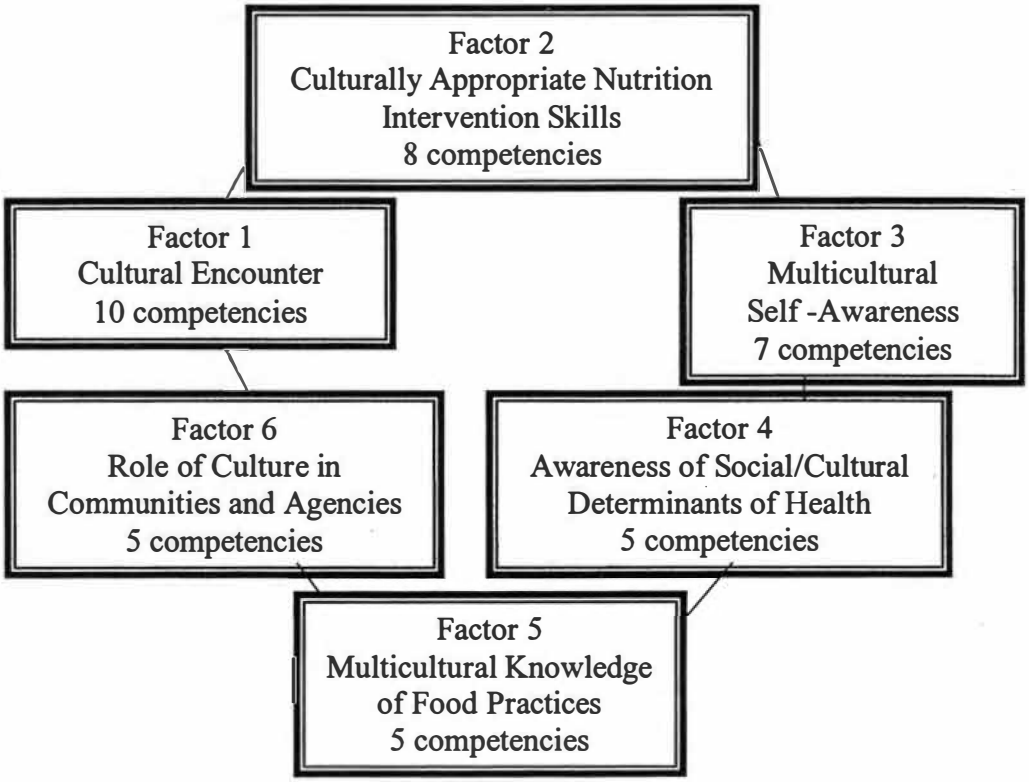

Figure 2.
Validated Multicultural Nutrition Counseling Competency Model

Table 4 Multicultural Nutrition Counseling Competencies

Cultural Encounter (Factor 1)	**Factor Loadings[1]**
Listen with empathy	0.685
Respect client's religious and/or spiritual beliefs and values, because they affect worldview, food and health practices	0.683
Believe that cultural differences do not have to negatively affect communication or counseling relationships	0.651
Accept and respect differences among cultural groups	0.620
Gain trust and respect of individuals who are culturally different from self	0.519
Be willing to build on the client's own problem-solving ability within his/her cultural context	0.599

Table 4. Continued	
Be open-minded and willing to be a learner instead of the expert when it comes to the client's life experiences and worldview	0.597
Value the client's right to evaluate nutrition counseling advice within his/her own cultural environment	0.553
Seek to minimize negative stereotypes	0.539
Recognize communication style differences and adapt own style to the client's modality	0.533
Culturally Appropriate Nutrition Intervention Skills (Factor 2)	
Use cultural knowledge and cultural sensitivity for appropriate nutrition interventions and strategies	0.775
Apply medical nutrition therapy strategies that are culturally appropriate	0.767
Apply nutrition-related health promotion/disease prevention strategies that are culturally appropriate	0.758
Develop and select culturally appropriate nutrition education and counseling materials	0.670
Receive and send verbal and nonverbal messages that are culturally appropriate for the client	0.575
Have general knowledge of cultural groups, their families and communities, values and beliefs, characteristics and resources	0.572
Demonstrate ability to adjust own counseling style to meet client's needs, values, and lifestyle	0.550
Differentiate between individual cultural differences and universal similarities	0.540
Multicultural Self-Awareness (Factor 3)	
Be aware and sensitive to own cultural heritage	0.786
Recognize limits of own cultural competencies and abilities	0.654
Recognize how own cultural background, experiences, attitudes, values, and biases influence nutrition counseling	0.609
Use own cultural heritage as a starting point to understand others who are culturally different	0.588

Table 4. Continued	
Recognize own stereotypes and preconceived notions that may affect interaction with other culturally different groups	0.573
Recognize how own racial and cultural heritage impacts personal and professional definition of normal and abnormal food practices	0.546
Be comfortable with differences that exist between self and culturally diverse clients	0.530
Awareness of Social/Cultural Determinants of Health (Factor 4)	
Seek to understand self as a racial and cultural being	0.693
Understand how societal conditions, such as oppression and stereotyping, affect one personally and professionally	0.608
Recognize that minority populations have to bridge at least two cultures and this status influences food practices	0.585
Contrast one's own beliefs and attitudes with those of culturally different clients in a nonjudgmental fashion	0.564
Value bilingualism of the counselor as an asset to counseling	0.502
Multicultural Knowledge of Food Practices (Factor 5)	
Have general knowledge of cultural eating patterns and family traditions	0.807
Understand food selection, preparation, and storage within a cultural context	0.737
Possess specific knowledge of cultural values, health beliefs, and nutrition practices of particular groups served, including culturally different clients	0.682
Familiarize self with relevant research and latest findings regarding nutrition-related health problems of various ethnic, racial, and other cultural groups	0.667
Have knowledge and understanding of differences within cultural groups and variations in food practices	0.509
Role of Culture in Communities and Agencies (Factor 6)	
Identify institutional or agency barriers that prevent some cultural groups from using nutrition and health services	0.655

Table 4. Continued	
Evaluate new techniques, research, and knowledge as to validity and applicability in working with culturally different populations	0.665
Demonstrate the generic characteristics of counseling and how they may clash with the cultural values of various minority groups	0.568
Advocate for reduction or removal of institutional or agency barriers that prevent some cultural groups from using nutrition and health services.	0.562
Work to learn about the unique characteristics, abilities, and knowledge of the culturally different client by working collectively with community leaders or members	0.532

[1]Competencies with factor loading values greater than 0.500 were accepted.

DISCUSSION

From our validation test for the model for multicultural nutrition counseling competency, 40 competencies emerged in 6 factors: Cultural Encounter, Culturally Appropriate Nutrition Intervention Skills, Multicultural Self-Awareness, Awareness of Social/Cultural Determinants of Health, Multicultural Knowledge of Food Practices, and Role of Culture in Communities and Agencies. The resulting model is different from the original model because it contains 3 additional factors and 12 more competencies, but it is similar in other aspects.

The original model only had 3 factors, addressing multicultural nutrition counseling skills, knowledge, and awareness, all of which were maintained in the new model. However, 3 new factors emerged, which allowed for more specificity

and clarification of the model. One of the new factors, Awareness of Social/Cultural Determinants for Health, allowed for a more specific type of awareness, different from self-awareness. The other two new factors, Cultural Encounter and Role of Culture in Communities and Agencies, added new dimensions to the model.

Factor 2, Culturally Appropriate Nutrition Intervention Skills, and Factor 6, Role of Culture in Communities and Agencies are similar to Factor 1, Multicultural Nutrition Counseling Skills, in the original model. The new factors include two competencies not found in the original model's single factor. As a group the competencies in the new Factor 6 display a more specific set of skills related to systems, while those in the new Factor 3 are related to individual intervention skills. This expands the model in a way that is consistent with the cultural competence research to highlight both individual and system or agency competence (8, 10).

Factor 3, Multicultural Self-Awareness, in the new model is very similar to Factor 2, Multicultural Awareness, in the original model. Specifically, both the original and the new model share 5 competencies. Two competencies in the new model were not included in the old model and one competency that was in the old model was not included in the new model.

Similarly, Factor 5 in the new model, Multicultural Knowledge of Food Practices, is similar to Factor 3, Multicultural Food and Nutrition Counseling

Knowledge, in the original model. One competency from the original model was not retained in the new model, but the factor's theme was maintained.

Factor 1, Cultural Encounter, and Factor 4, Awareness of Social/Cultural Determinants of Health, contain competencies that were not in the original model. Factor 1 contains three competencies that were added by the expert panel and therefore did not exist in the original set of competencies. Four competencies that were not included in the original model are now part of this new factor. The remaining three competencies were part of the original model. All five competencies in Factor 4 were not included in the original model, possibly because they were revised by the expert panel and may have been overlooked. These two factors also represent ideas that were missing in the original model, but have appeared in other multicultural competency models (8, 10).

Factor 1, Cultural Encounter, appeared in the model developed by Campinha-Bacote (10). This factor represents the process that allows the counselor to be involved directly in cross-cultural situations. It also takes into account intraethnic variation, or the idea that there is variation within one cultural group as well as across cultural groups, because of differences in geographic location, socioeconomic status, occupation, and education. Finally, this factor takes into account the importance of face-to-face interaction and how this is necessary to refine or reevaluate existing knowledge about a specific cultural group (10).

Factor 4, Awareness of Social/Cultural Determinants of Health, is similar to a factor in the model for multicultural counseling competencies developed by Sue et al. (8). Within this model, there is a factor called understanding the worldview of the culturally different client, specifically within the subset of beliefs and attitudes. The ideas represented within this factor emphasize the need for the counselor to know himself or herself and to avoid letting his or her own biases interfere with the counseling process (8). By avoiding ethnocentrism, a counselor can be much more effective in cross-cultural interactions (8).

Another major similarity between the new and original model (5) is the presence of two factors specific to food and nutrition practices. Food is a central part of culture (17), and it is extremely important for the nutrition counselor to not only recognize but also understand it is an integral part of the nutrition counseling process. The presence of two factors, Multicultural Knowledge of Food Practices and Culturally Appropriate Nutrition Intervention Skills, specific to nutrition shows that there is a difference between general multicultural counseling competencies and nutrition related multicultural counseling competencies.

By surveying a more representative sample of Registered Dietitians, more dimensions and extensions to the original model (5) were identified. The new model incorporated 12 new competencies. Four were added by the expert panel and 8 were either revised by the expert panel or excluded in the original factor analysis. This indicates that although the original model may have described the factors correctly since they reappear in the new model, some competencies may

have been missing. These competencies are recommended for multicultural nutrition counseling (6, 18-20), and thus this model may be more complete. Of the 16 competencies that were not included, 3 received unsolicited comments from a number of respondents as unclear statements, which may be why they were excluded. In addition, only 5 of the competencies in the original model were not retained in the new model. It remains unclear why the remaining 8 competencies were not included in the model. One possible reason they were not included may be due to the revisions made by the expert panel. The expert panel also added competencies to the model and although some of the new competencies did fit into the model, others may have fallen out of the factor analysis.

Because Registered Dietitians who spent more time counseling culturally different clients rated the competencies on factors 1 and 3-6 higher than those who counseled culturally different clients for less than five hours per week, these Registered Dietitians viewed the competencies on these factors as more essential. This lends construct validity to the model, assuming that more experience counseling culturally different clients raises awareness. The only factor for which there were no differences was Factor 2, Culturally Appropriate Nutrition Intervention Skills. All Registered Dietitians who counsel view these skills equally essential. This may be due to the experience level of the population surveyed. Since most of the respondents had 10 or more years of experience, they may not have been exposed to the current Didactic Programs in Dietetics and/or

Dietetic Internship competencies, which have recently added competencies related to culture, and more specifically related to Factor 2. It may be necessary to survey recent graduates who counsel culturally different clients more than 5 hours per week to further demonstrate construct validity with this factor.

Registered Dietitians who have participated in a cultural competence or nutrition counseling class, continuing education program, or workshop rated competencies on the following factors significantly higher: Cultural Encounter, Culturally Appropriate Nutrition Intervention Skills, and Multicultural Self-Awareness. These Registered Dietitians view these competencies as more essential and possibly because these are the types of things that are taught and discussed in those specific settings. The other factors Awareness of Social/Cultural Determinants of Health, Multicultural Knowledge of Food Practices, and Role of Culture in Communities and Agencies may contain competencies that are discussed less in educational settings.

Further validation of this model is necessary before the model and its competencies can be used in a practical setting. The steps to develop and validate the model (5) were similar to those used by Sodowsky et al (9) in the development of multicultural counseling competencies for psychology. First, an extensive literature review was conducted to develop the competencies. This was followed by a survey sent to a random sample of students and members of state psychology associations. The data were analyzed using principal-axis factor

analysis. The original multicultural nutrition counseling competency model followed similar steps (5) to develop the competencies.

Sodowsky et al (9) continued their study to validate the competencies, by surveying a broader random sample of counselors in the field than used to develop the competencies. The data were analyzed using principle-axis factor analysis in addition to confirmatory factor analysis (CFA) (9). This procedure tests whether actual data fit into an identified model (9). CFA is more rigid than exploratory factor analysis because the model must already be accepted as valid. In this study to validate the model developed by Harris-Davis (5), a broader sample of Registered Dietitians was surveyed. Therefore, generalized least squares (GLS), a different type of exploratory factor analysis, was used instead of the more stringent CFA.

Because the validity of the model has been tested further with a more representative sample, the next step is more stringent testing. If possible, it would be beneficial to survey a specific sample of Registered Dietitians, namely ones involved in counseling and ones not at all involved in counseling, similar to the samples used by Sodowsky et al (9). It may be difficult to identify these samples, but it may be possible to get this information from the Commission on Dietetic Registration or simply by using counseling as exclusion criteria to a large sample of dietitians. The data obtained from this survey then can be analyzed using CFA to determine the validity of the model.

Another way of establishing validity of the competencies further is to survey practitioners and their supervisors. One study (21) asked practitioners if specific competencies should be expected from them and their supervisors were asked if their staff exhibited the competency. By comparing the expected and the evidenced responses, areas where more training was necessary or where curricula could be developed were identified. By asking both practitioners and supervisors, a strong credence could be given to the identified competencies (21).

The sample in this study worked an average of 20.1 years in the field of nutrition and dietetics. This average is similar to that found in the Harris-Davis study (5). However, a large percentage (94%) of the individuals in the current study had more than 10 years of experience. This may seem like a very large percentage, however, from dietitians registered with CDR, over 32% registered before 1991. This means that a large percentage of Registered Dietitians do have at least 10 years of experience (22) although survey respondents had more experience.

Applications

The validated model can provide a foundation for promoting the multicultural nutrition counseling competence of Registered Dietitians. The American Dietetic Association's accrediting agency, the Commission on Accreditation of Dietetics Education, can use the model's constructs and competencies when reviewing the standards for education and practice for

Didactic Programs in Dietetics and Dietetic Internships. Individual programs can use the model in evaluating their own curricula and practice requirements. Using the model to plan, implement, and evaluate continuing education programs can help enhance staff development and training. Ultimately it is anticipated that a validated model will provide the basis for developing a self-assessment tool whereby Registered Dietitians can evaluate their own competence and develop professional development plans accordingly.

The development and validation of these competencies can also be used in conjunction with current resources about eliminating health disparities consistent with Healthy People 2010. For example, the United States Department of Agriculture (USDA) recently published a compilation of nutrition education and background resources for those working in various ethnic and cultural groups. The information in the document contains resources about where to find information on customs and cultural influences for developing multicultural skills (23).

Finally, working with diverse populations requires students, as future clinicians, to develop the skills that will help them become more culturally competent (24). Educational curricula that focus on gathering information about target populations, developing community relationships, and planning, implementing, and evaluating programs in a culturally sensitive manner will be successful in meeting needs of communities (25). By recruiting and retaining underrepresented students and dietetics professionals, quality care for ethnic

minority clients will be encouraged (26). One recommendation from the Institute Of Medicine (27), based on a study related to unequal treatment in American health care, was to integrate cross-cultural education into the training of all current and future health professionals. Cross cultural education aims to enhance a student's personal insight and empathy with people from diverse cultures and can help them treat and communicate with their patients more effectively once they become health professionals (28). This type of education will also enhance awareness of cultural differences between the health care provider and the patient (28).

Limitations

This study was intended to validate a proposed model for multicultural nutrition counseling competency. However, some limitations can be noted. One may be the reticence of study participants to reject any of the competencies as being unessential. In an attempt to eliminate this problem, survey anchors for each point on the 7-point Likert-like scale were added. Again, for the purposes of this survey, the term essential was defined as a leading principle necessary for entry-level practice as a Registered Dietitian over the next 10 years (13). Both of these measures were taken into account for further extraction of the essential competencies and expansion of the possibilities for a more accurate factor analysis.

The study participants were selected randomly from the Commission on Dietetic Registration, of which the majority of members are Caucasian (1). However, identification by race/ethnicity is not possible. This makes it difficult to overrepresent certain minority populations. To address this limitation, the expert panel members were chosen in an attempt to overrepresent minority populations.

Finally, recorded responses are not only self-report, but also from the perspective of the practitioner only, and not the client. Although the model was based on research that has used multicultural counseling competence models in practice, this model has yet to be used in practice and, therefore, to include the client's perspective.

Summary

Multicultural competency is a requirement for every Registered Dietitian, not a luxury (29). By validating these multicultural nutrition counseling competencies, agencies and organizations can implement policies to enhance competence in this area. Registered Dietitians can also use the competencies to determine which individual skills need to be developed. This is important, as multicultural competence becomes a necessary skill for all health care professionals as the United States continues to work towards the goal of eliminating health disparities.

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APPENDICES

APPENDIX A

Original Multicultural Nutrition Counseling Competencies

Factor 1: Multicultural Nutrition Counseling Skills

1. Have ability to differentiate between individual, cultural differences, and universal similarities
2. Be experienced in application of medical nutrition therapy and nutrition-related health promotion/disease prevention strategies that are culturally appropriate
3. Have ability to use cultural knowledge and sensitivity for appropriate nutrition intervention and materials
4. Take responsibility of collectively working with community leaders or members about unique knowledge or abilities for benefit of the culturally different client
5. Be able to evaluate new techniques, research, and knowledge as to validity and applicability in working with culturally different populations
6. Take responsibility in educating client to the nutrition counseling process (goals, expectations, and counselor's orientation), which includes the client's values and lifestyle
7. Be able to send and receive verbal and nonverbal messages and to alter them as necessary in recognition that helping style and approaches may be culture bound
8. Have knowledge of cultural groups, their family and communities, values and beliefs, characteristics and resources
9. Understand how such things as race, culture, and economics may affect not only food practices but also nutrition-related health problems and appropriateness of counseling approaches
10. Have a clear and explicit knowledge and understanding of the generic characteristics of counseling and how they may clash with the cultural values of various minority groups

11. Identify additional resources (agencies, persons, informal helping network, ethnic food stores, etc) that may be used by the client
12. Have ability to gain trust and respect of individuals who are culturally different from self
13. Not be adverse to seeking consultation with traditional healers and religious and spiritual leaders and practitioners in the treatment of culturally different clients when appropriate
14. Be aware of institutional or agency barriers that prevent some cultural groups from using nutrition health services

Factor 2: Multicultural Awareness

15. Be aware of how own cultural background and experiences and attitudes, values, and biases influence nutrition counseling
16. Be able to recognize limits of own cultural competencies and abilities
17. Have moved from being culturally aware to being aware and sensitive to own cultural heritage and to valuing and respecting differences
18. Be comfortable with differences that exist between self and clients in terms of race, ethnicity, culture, beliefs, and food practices
19. Believe in the value and significance of own cultural heritage and world view as a starting point for understanding others who are culturally different from self
20. Believe that cultural differences do not have to negatively affect communication or counseling relationships
21. Be aware of own stereotypes and preconceived notions that may hold toward other culturally different groups

22. Be knowledgeable about communication style differences, how own style may clash with or foster the counseling process with culturally different clients, and how to anticipate the impact style may have on others

Factor 3: Multicultural Food and Nutrition Counseling Knowledge

23. Understand food selection, preparation, and storage with a cultural context
24. Have knowledge of cultural eating patterns and family traditions such as core foods, traditional celebrations, and fasting
25. Familiarize self with relevant research and latest findings regarding food practices and nutrition-related health problems of various ethnic and racial groups
26. Possess specific knowledge of cultural values, health beliefs, and nutrition practices of particular groups served, including culturally different clients
27. Have knowledge about within-group differences and understanding of variations in food practices
28. Apply helping principle of "starting where the client is" by considering changes in eating patterns, such as addition of American foods or substitution of foods

Factors that did not load in the factor analysis

29. Take risks and see these risks as necessary and important for personal and professional growth
30. Have specific knowledge and about her own racial and cultural heritage and how it personally and professionally affects her definition of normal and abnormal food practices and the nutrition counseling process
31. Possess knowledge and understanding about how societal conditions such as oppression and stereotyping, affects her personally and in her nutrition work

32. Be constantly seeking to understand herself as a racial and cultural being and actively seeking a nonracist identity
33. Contrast her own beliefs and attitudes with those of her culturally different clients in a nonjudgmental fashion
34. Recognize that minority populations have to be at least bicultural and this status creates unique influences on food practices
35. Be open-minded and willing to be a learner instead of the expert when it comes to the client's life experiences and how she views the world
36. Demonstrate a willingness to work with clients of different cultural groups
37. Respect her client's religious and/or spiritual beliefs and values, because they affect worldview, food and health practices
38. Respect native or indigenous helping practices and community's help-giving network
39. Value bilingualism and do not view another language as a barrier to counseling
40. Take responsibility for interacting in the language requested by the client directly or through an interpreter and if not feasible, make appropriate referral
41. Have training and abilities in use of traditional assessment instrument which includes quantitative and qualitative measures of diets within a cultural context to determine food experiences, usage, behaviors, and habits
42. Be able to assess, plan, implement, and evaluate nutrition intervention tailored to the client's cultural perspective
43. Using flexibility as a key to operate within ethical guidelines
44. Be acquiring or have acquired skills in a language other than her own
45. Create a comfortable environment setting for effective nutrition counseling by expressing an interest and asking appropriate questions
46. Actively seek out educational, consultative, research, and training experiences to improve her understanding and effectiveness in working with culturally different populations

APPENDIX B

Expert Panel Invitation

May 7, 2002

Dear Nutrition Colleague:

Hello! We are writing to invite you to be an Expert Panel Member for a validation study of multicultural nutrition counseling competencies for entry-level Registered Dietitians. Your role in this research will be to review the proposed competency model, comment on the competencies specifically, and then participate in a 2-hour audio conference call. Prior to the conference call, we will send you the competency model and a few selected articles to review. You will be asked to comment on the competencies and components of the model and make proposed changes as you see necessary. Your comments will need to be e-mailed or faxed to me, Reena Oza, before we convene for the conference call, so that I can summarize all of the recommendations from panel members. During the conference call, we will review the summary comments collectively. The purpose of this step is to test content validity of the model. Your review will be used as a basis for phase two of the research, which will be a mailed survey of Registered Dietitians. The attached page contains proposed dates for the conference call. We hope that you will agree to participate on the Expert Panel and signify this by indicating your availability in the boxes. Please indicate the times on the designated days that you are available to participate. Please either fax or e-mail me your response by **MONDAY, MAY, 13 2002**. If you do not reply by this date, I will call you.

You have been selected to participate on the panel, because of your interest, expertise, and work with multicultural populations. Your participation is important and we would appreciate your voluntary participation. There are no financial obligations for you to participate, as the conference call costs will be assumed by the project. Participation is voluntary and you can withdraw at any time without penalty. We recognize that your time is valuable. Therefore, we have a focused objective for this research and we anticipate your obligations will be completed following the conference call.

Although recommendations made during the conference call will be recorded in writing, there will be no audio recording. Your responses will be kept confidential and we will report only the panel's recommendations. There are no foreseeable risks and neither individuals nor agencies will be identified. All recorded written materials will be stored securely and only the researchers will have access to the written recorded information.

We look forward to hearing about your interest in participating in this very important project. If you have any questions, please do not hesitate to contact either of us by telephone or e-mail.

Sincerely,

Reena Oza
Public Health Nutrition
Graduate Student
865/692-5409; roza@utk.edu

Betsy Haughton, EdD, RD, LDN
Associate Professor;
Director, Public Health Nutrition
865/974-6267; haughton@utk.edu

TO: REENA OZA FAX: (865) 974-3491
E:MAIL: roza@utk.edu
FROM: _____ (insert your name here)

Decision to Participate:

_____ Yes, I would like to participate

_____ No, I cannot participate

Availability:

Please indicate *all of the times you are available* on the indicated dates by placing an "X" in the respective boxes. Remember the conference call is to be 2 hours long so take this into consideration when filling in the boxes. All times listed are Eastern Daylight Savings Time.

EXAMPLE:
Expert Panel member A is available anytime from 1:00pm – 4:00pm Eastern daylight savings time on Tuesday, May 28, 2002:

Time	Tuesday, May 28, 2002
1:00pm – 2:00pm	X
2:00pm – 3:00pm	X
3:00pm – 4:00pm	X
4:00pm – 5:00pm	

PLEASE INPUT YOUR AVAILABILITY BELOW:

Eastern Daylight Savings Time

Time	Tuesday, May 28, 2002	Time	Wednesday, May 29, 2002
1:00pm – 2:00pm		11:00am – 12:00pm	
2:00pm – 3:00pm		1:00pm – 2:00pm	
3:00pm – 4:00pm		2:00pm – 3:00pm	
4:00pm – 5:00pm		3:00pm – 4:00pm	
		4:00pm – 5:00pm	

APPENDIX C

Conference Call Materials

May 15, 2002

Dear Nutrition Colleague:

Thank you for agreeing to participate as part of the expert panel to validate multicultural nutrition counseling competencies! Your input will be a valuable part of the validation process so again, thank you for volunteering your time! The chosen date for the conference call is **Wednesday, May 29, 2002 from 1:00pm – 3:00pm (Eastern Daylight SavingsTime).**

This packet contains several items that you will need to review prior to the telephone conference call.

1. A copy of the published multicultural counseling competency model (Harris-Davis E, Haughton B. *J Am Diet Assoc.* 2000; 100: 1178-1185.)
2. Five articles pertaining to the topic
    a. Curry KR. Multicultural competence in dietetics and nutrition. *J Am Diet Assoc.* 2000; 100: 1142-1143.
    b. Sue DW, et al. Position Paper: Cross-Cultural Counseling Competencies. *Counsel Psychol.* 1982; 10: 45-52.
        i. This article was included in this packet because this is one of the first efforts by any profession to address multicultural counseling competency issues.
    c. Bruening KS. 2002 accreditation standards for dietetics education. *J Am Diet Assoc.* 2002; 102: 566-577.
        i. The updated standards include cultural and diversity issues. These changes are indicated in bold. This article was included to allow the reviewer to see how ADA is addressing multicultural issues within the organization. This article also contains the list of competencies for entry-level graduates upon completion of the supervised practice component of dietitian education and the changes made to it.
    d. An overview of the ADA standards of education
        i. This was included to allow the reviewer to understand ADA's view on competence of program graduates.
    e. ADA Diversity Philosophy Statement
        i. This was included to allow the reviewer to understand ADA's opinion on the issue of diversity.

Upon reviewing these materials, please take a moment to compile your thoughts on how the model, either factors or competencies, should be different by using the

attached sheets. Each competency is listed on the attached sheets under the appropriate factor. There is also a list of competencies that were tested but did not load on the model. Please indicate whether you think each competency should be accepted, rejected, or revised. If you think a competency should be revised, then please indicate how you think it should be revised. Then, please fax or e-mail me ((865) 974-3491 OR roza@utk.edu) the sheets by **Thursday, May 23, 2002.** I will compile the answers I receive from all the expert panel participants in a list. Prior to the telephone conference call, I will e-mail each participant the list of proposed changes. No names will be identified in the compiled list. This list should be reviewed by each participant before the telephone conference call.

In addition to the above materials, this packet also contains an agenda for the telephone conference call and instructions on when and where to call on **Wednesday, May 29, 2002 from 1:00pm – 3:00pm (Eastern Daylight Savings Time).** The moderator for the call will be the graduate student involved in this project, Reena Oza.

Again, please fax or e-mail your comments to me ((865) 974-3491 OR roza@utk.edu) on or before **Thursday, May 23, 2002.** If you have any questions prior to the telephone conference call, please e-mail or call us.

Sincerely,

Reena Oza
Public Health Nutrition
Graduate Student
865/692-5409; roza@utk.edu

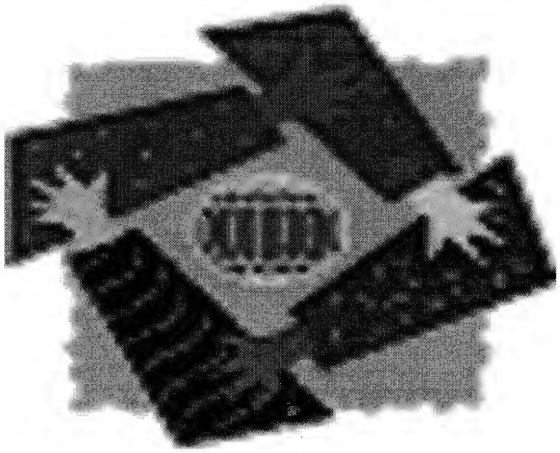
Betsy Haughton, EdD, RD, LDN
Associate Professor; Director,
Public Health Nutrition
865/974-6267; haughton@utk.edu

Enclosures

APPENDIX D

Multicultural Nutrition Counseling Competency Survey

Multicultural Nutrition Counseling Competency Survey, 2002



Department of Nutrition
The University of Tennessee
Knoxville, TN 37996-1900

Section 1: Personal Inventory

The following questions refer to your work position, educational background, and other relevant information. Please read each question carefully and blacken the appropriate circle.

1) In which of the following geographic areas (or regions) do you live? (Blacken one circle).
   ① Region (or area) A
      (CT, IL, IN, MA, ME, MI, NH, OH, PA, RI, VT, WI)
   ② Region (or area) B
      (IA, KS, MN, MO, ND, NE, SD)
   ③ Region (or area) C
      (AL, AR, DC, DE, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV)
   ④ Region (or area) D
      (AK, AZ, CA, CO, HI, ID, MT, NJ, NM, NY, NV, OR, UT, WA, WY)

2) Do you belong to any of the following ADA practice group(s)? (Blacken all appropriate circles)
   ① Diabetes Care and Education
   ② Dietitians in General Clinical Practice
   ③ Gerontological Nutritionists
   ④ Pediatric Nutrition
   ⑤ Public Health/Community Nutrition
   ⑥ Sports, Cardiovascular, and Wellness Nutritionists
   ⑦ Woman and Reproductive Nutrition
   ⑧ Do not belong to any of these practice groups
   ⑨ Other (please specify) _____

3) Which of the following best describes your dietetic registration status? (Blacken all appropriate circles)
   ① Registered Dietitian
   ② Dietetic Registration – eligible
   ③ Dietitian Technician Registered
   ④ Other (specify) _____

4) Please blacken the circle for the highest degree completed.
   ① Associate Degree
   ② Bachelor's Degree
   ③ Master's Degree
   ④ Doctoral Degree
   ⑤ Post-Doctoral Degree

5) What is your ethnicity?
   ① Hispanic or Latino
   ② Not Hispanic or Latino

6) What is your race?
   ① White
   ② Black or African American
   ③ American Indian or Alaska Native
   ④ Asian
   ⑤ Native Hawaiian and Other Pacific Islander
   ⑥ 2 or more races
   ⑦ Some other race (please specify)_____
   ⑧ None of the above

7) What is (are) your primary and secondary language(s)?

Primary	Secondary	
①	①	English
②	②	Spanish
③	③	French (includes French Creole)
④	④	Filipino
⑤	⑤	Chinese
⑥	⑥	Japanese
⑦	⑦	Native American languages
⑧	⑧	Sign Language
⑨	⑨	Other (please specify)_____
	⑨	No second language

8) Which of the following classes, workshops, or continuing education programs have you ever taken? (Blacken the appropriate circle)

① Cultural competence continuing education program, workshop or class
② Nutrition counseling continuing education program, workshop or class
③ Both of the above
④ None of the above

Employment History:

9) Are you currently working as a RD in nutrition, dietetics, or food service?

① Yes, skip to question 12
② No, go to question 10

10) For how many years did you work as a RD in nutrition, dietetics, or food service? Please indicate number of years.

_____ (years) _____ (months)
CONTINUE WITH QUESTION 11

11) How many years ago were you last employed as an RD in nutrition, dietetics, or food service? Please indicate number of years.

_____ (years) _____ (months) **GO SECTION 2**

12) How many years have you worked as an RD in nutrition, dietetics, or food service? Please indicate number of years.

_____ (years) _____ (months)
CONTINUE WITH QUESTION 13

13) Which one of the following best describes your current primary work position? (Blacken the appropriate circle)
① Administration/Food service operation
② Ambulatory/Outpatient clinic or office
③ Clinical/Acute and/or Long-term care facility
④ College/University
⑤ Community/Public health facility or organization
⑥ Private practice/Self-employed
⑦ Retired or currently not employed
⑧ Other (please specify)_____

14) Which one of the following best describes your current secondary work position? (Blacken the appropriate circle)

① Do not have a secondary work position
② Administration/Food service operation
③ Ambulatory/Outpatient clinic or office
④ Clinical/Acute and/or Long-term care facility
⑤ College/University
⑥ Community/Public health facility or organization
⑦ Private practice/Self-employed
⑧ Other (please specify)_____

15) Do you provide nutrition counseling or education to clients different from your own culture (e.g. race, ethnicity, socioeconomic status, etc.)?

① Yes, Please go to question 16
② No, Please go to Section 2 →

16) On average, how many hours per week do you provide nutrition counseling or education to culturally different clients? Please indicate number of years.

_____ (hours per week)

↓

17) I have provided nutrition counseling or education to culturally different clients for the past _____ year(s).

PLEASE GO TO SECTION 2 →

SECTION 2: Entry-level Multicultural Nutrition Counseling Competencies

The following is a list of competencies related to attitudes and beliefs, knowledge and skills for entry-level dietitians.

Please blacken the appropriate circle to determine the essentiality of each competency for entry-level Registered Dietitians in the next 10 years.

The rating scale is as follows:
1 = Somewhat essential
3 = Moderately essential
5 = Very essential
7 = Absolutely essential

For the purposes of this survey, the term essential can be defined as a leading principle necessary for entry-level practice as an RD over the next 10 years. Please be candid when responding to each competency.

In the next ten years, how essential will it be for the entry-level Registered Dietitian to:	Somewhat essential		Moderately essential		Very essential		Absolutely essential
1. Differentiate between individual cultural differences and universal similarities.	①	②	③	④	⑤	⑥	⑦
2. Apply medical nutrition therapy strategies that are culturally appropriate.	①	②	③	④	⑤	⑥	⑦
3. Apply nutrition-related health promotion/disease prevention strategies that are culturally appropriate.	①	②	③	④	⑤	⑥	⑦

In the next ten years, how essential will it be for the entry-level Registered Dietitian to:	Somewhat essential		Moderately essential		Very essential		Absolutely essential
4. Use cultural knowledge and cultural sensitivity for appropriate nutrition interventions and strategies.	①	②	③	④	⑤	⑥	⑦
5. Develop and select culturally appropriate nutrition education and counseling materials.	①	②	③	④	⑤	⑥	⑦
6. Work to learn about the unique characteristics, abilities, and knowledge of the culturally different client by working collectively with community leaders or members.	①	②	③	④	⑤	⑥	⑦
7. Evaluate new techniques, research, and knowledge as to validity and applicability in working with culturally different populations.	①	②	③	④	⑤	⑥	⑦
8. Take responsibility for explaining the nutrition counseling process to the client.	①	②	③	④	⑤	⑥	⑦
9. Demonstrate ability to adjust own counseling style to meet client's needs, values, and lifestyle.	①	②	③	④	⑤	⑥	⑦
10. Receive and send verbal and nonverbal messages that are culturally appropriate for the client.	①	②	③	④	⑤	⑥	⑦
11. Have general knowledge of cultural groups, their families and communities, values and beliefs, characteristics and resources.	①	②	③	④	⑤	⑥	⑦

In the next ten years, how essential will it be for the entry-level Registered Dietitian to:	Somewhat essential		Moderately essential		Very essential		Absolutely essential
12. Demonstrate how things such as race, culture, and economics may affect not only food practices, but also nutrition-related health problems and the appropriateness of counseling approaches.	①	②	③	④	⑤	⑥	⑦
13. Demonstrate the generic characteristics of counseling and how they may clash with the cultural values of various minority groups.	①	②	③	④	⑤	⑥	⑦
14. Identify additional resources (agencies, persons, informal helping networks, ethnic food stores, etc) that may be used by the client.	①	②	③	④	⑤	⑥	⑦
15. Gain trust and respect of individuals who are culturally different from self.	①	②	③	④	⑤	⑥	⑦
16. Seek consultation with traditional healers or religious and spiritual leaders/practitioners in the treatment of culturally different clients when appropriate.	①	②	③	④	⑤	⑥	⑦
17. Identify institutional or agency barriers that prevent some cultural groups from using nutrition and health services.	①	②	③	④	⑤	⑥	⑦
18. Advocate for reduction or removal of institutional or agency barriers that prevent some cultural groups from using nutrition and health services.	①	②	③	④	⑤	⑥	⑦

In the next ten years, how essential will it be for the entry-level Registered Dietitian to:	Somewhat essential		Moderately essential		Very essential		Absolutely essential
19. Modify the counseling process in response to listening to the client's worldview.	①	②	③	④	⑤	⑥	⑦
20. Recognize how own cultural background, experiences, attitudes, values, and biases influence nutrition counseling.	①	②	③	④	⑤	⑥	⑦
21. Recognize limits of own cultural competencies and abilities.	①	②	③	④	⑤	⑥	⑦
22. Be aware and sensitive to own cultural heritage.	①	②	③	④	⑤	⑥	⑦
23. Be comfortable with differences that exist between self and culturally diverse clients.	①	②	③	④	⑤	⑥	⑦
24. Use own cultural heritage as a starting point to understand others who are culturally different.	①	②	③	④	⑤	⑥	⑦
25. Believe that cultural differences do not have to negatively affect communication or counseling relationships.	①	②	③	④	⑤	⑥	⑦
26. Recognize own stereotypes and preconceived notions that may affect interaction with other culturally different groups.	①	②	③	④	⑤	⑥	⑦
27. Recognize communication style differences and adapt own style to the client's modality.	①	②	③	④	⑤	⑥	⑦

In the next ten years, how essential will it be for the entry-level Registered Dietitian to:	Somewhat essential		Moderately essential		Very essential		Absolutely essential
28. Accept and respect differences among cultural groups.	①	②	③	④	⑤	⑥	⑦
29. Understand food selection, preparation, and storage within a cultural context.	①	②	③	④	⑤	⑥	⑦
30. Have general knowledge of cultural eating patterns and family traditions.	①	②	③	④	⑤	⑥	⑦
31. Familiarize self with relevant research and latest findings regarding nutrition-related health problems of various ethnic, racial, and other cultural groups.	①	②	③	④	⑤	⑥	⑦
32. Possess specific knowledge of cultural values, health beliefs, and nutrition practices of particular groups served, including culturally different clients.	①	②	③	④	⑤	⑥	⑦
33. Empathize with other cultural worldviews.	①	②	③	④	⑤	⑥	⑦
34. Have knowledge and understanding of differences within cultural groups and variations in food practices.	①	②	③	④	⑤	⑥	⑦
35. Work with clients to maintain their traditional eating patterns to the extent possible and in relationship to available foods and health needs.	①	②	③	④	⑤	⑥	⑦
36. Be willing to take risks because they are necessary and important for personal and professional growth.	①	②	③	④	⑤	⑥	⑦
37. Recognize how own racial and cultural heritage impacts personal and professional definition of normal and abnormal food practices.	①	②	③	④	⑤	⑥	⑦

In the next ten years, how essential will it be for the entry-level Registered Dietitian to:	Somewhat essential		Moderately essential		Very essential		Absolutely essential
38. Understand how societal conditions, such as oppression and stereotyping, affect one personally and professionally.	①	②	③	④	⑤	⑥	⑦
39. Seek to understand self as a racial and cultural being.	①	②	③	④	⑤	⑥	⑦
40. Contrast one's own beliefs and attitudes with those of culturally different clients in a nonjudgmental fashion.	①	②	③	④	⑤	⑥	⑦
41. Recognize that minority populations have to bridge at least two cultures and this status influences food practices.	①	②	③	④	⑤	⑥	⑦
42. Be open-minded and willing to be a learner instead of the expert when it comes to the client's life experiences and worldview.	①	②	③	④	⑤	⑥	⑦
43. Respect client's religious and/or spiritual beliefs and values, because they affect worldview, food and health practices.	①	②	③	④	⑤	⑥	⑦
44. Respect the variety of helping practices that exist within cultures and community networks.	①	②	③	④	⑤	⑥	⑦
45. Value bilingualism of the counselor as an asset to counseling.	①	②	③	④	⑤	⑥	⑦
46. Seek to minimize negative stereotypes.	①	②	③	④	⑤	⑥	⑦

In the next ten years, how essential will it be for the entry-level Registered Dietitian to:	Somewhat essential		Moderately essential		Very essential		Absolutely essential
47. Tailor counseling to the client's cultural perspective.	①	②	③	④	⑤	⑥	⑦
48. Interact in the language requested by the client directly and, if not feasible, make appropriate referral.	①	②	③	④	⑤	⑥	⑦
49. Work with interpreters so translation is culturally appropriate and accurate.	①	②	③	④	⑤	⑥	⑦
50. Use nutrition, dietary, and counseling assessment instruments within the client's cultural context.	①	②	③	④	⑤	⑥	⑦
51. Counsel clients systematically.	①	②	③	④	⑤	⑥	⑦
52. Have skills in a language other than his/her own as appropriate for clients served.	①	②	③	④	⑤	⑥	⑦
53. Actively seek educational, consultative, research, and training experiences to improve understanding and effectiveness in working with culturally different populations.	①	②	③	④	⑤	⑥	⑦
54. Be willing to build on the client's own problem-solving ability within his/her cultural context.	①	②	③	④	⑤	⑥	⑦
55. Value the client's right to evaluate nutrition counseling advice within his/her own cultural environment.	①	②	③	④	⑤	⑥	⑦
56. Listen with empathy.	①	②	③	④	⑤	⑥	⑦

APPENDIX E

Cover Letters and Postcards

Dear Nutrition Colleague:

The University of Tennessee's Public Health Nutrition Program is conducting a research study on Multicultural Nutrition Counseling to determine how essential competencies are for entry-level Registered Dietitians in the next ten years. Multicultural competence is important given the increasing cultural diversity of our communities. Cultural diversity refers to all aspects of how clients may be unique including: race, ethnicity, socioeconomic status, education level, etc. Results from this study will provide a foundation for understanding how we should practice and promote multicultural continuing education and professional development opportunities.

You have been selected randomly from among Registered Dietitians belonging to the Commission on Dietetic Registration. Your responses are important and your participation is voluntary. You can withdraw at any time without penalty.

You will find enclosed the survey instrument and self-addressed, stamped envelope. We ask that you follow the instructions carefully and please be candid when responding to questions. Your responses will be kept confidential and we will report group results. There are no foreseeable risks in completing the questionnaire. Neither individuals nor agencies will be identified and no reference will be made to data that could link you to the research study. The data will be stored securely and only the researchers will have access to a code that matches names of participants with numbers on the returned envelopes. Returned questionnaires will not be matched to the codes or names of participants. This will help us maintain confidentiality, yet permit follow-up of unanswered questionnaires. The personal inventory questions are used for analytic purposes.

It is estimated that it will take you approximately 20-30 minutes to complete the questionnaire. After completing it, please return it in the enclosed self-addressed, stamped envelope.

We look forward to return of your completed questionnaire, which indicates informed consent as a participant in this study. We would appreciate receiving your completed questionnaire by July 19, 2002.

If you have any questions, you can contact us by phone or e-mail.

Sincerely,

Reena Oza
Public Health Nutrition
Graduate Student
865/692-5409; roza@utk.edu

Betsy Haughton, EdD, RD, LDN
Associate Professor
Director, Public Health Nutrition
865/974-6267; haughton@utk.edu

A questionnaire about multicultural nutrition counseling competencies was mailed to you last week. We are interested in your participation because your input will help us understand competencies relevant to dietitians in the next ten years.

If you have already completed and returned the questionnaire, please accept our sincere thanks. If not, please do so today. It is important that your input be included in this study so that the results will accurately represent dietetic professionals of various backgrounds and experiences.

If by chance you did not receive the questionnaire or it is misplaced, please call me (Reena: 865-692-5409) and I will send you another one immediately.

Sincerely,

Reena Oza
Public Health Nutrition
Graduate Student

Betsy Haughton EdD, RD, LDN
The University of Tennessee

Dear Nutrition Colleague:

A questionnaire about multicultural nutrition counseling competence was mailed to you from The University of Tennessee's Public Health Nutrition Program a few weeks ago. An analysis of returned questionnaires will determine what multicultural nutrition counseling competencies are essential for Registered Dietitians in the next 10 years. Your completed questionnaire has not been received as of July 19, 2002 and your input is very important.

You were randomly selected from Registered Dietitians belonging to the Commission on Dietetic Registration. Your responses are important and your participation is voluntary. You can withdraw at any time without penalty.

In case your questionnaire has been misplaced, we have enclosed another questionnaire and self-addressed stamped envelope. We ask that you follow the instructions carefully and please be candid when responding to questions. Your responses will be kept confidential and we will report group results. There are no foreseeable risks in completing the questionnaire. Neither individuals nor agencies will be identified and no reference will be made to data that could link you to the research study. The data will be stored securely and only the researchers will have access to a code that matches names of participants with numbers on the returned envelopes. Returned questionnaires will not be matched to the codes or names of participants. This will help us maintain confidentiality, yet permit follow-up of unanswered questionnaires. The personal inventory questions will be used for analytic purposes.

It is estimated that it will take you approximately 20-30 minutes to complete the questionnaire. After completing it, please return it in the enclosed self-addressed, stamped envelope.

We look forward to return of your completed questionnaire, which indicates informed consent as a participant in this study. We would appreciate receiving your completed questionnaire by August 7, 2002.

If you have any questions, you can contact us by phone or e-mail.

Sincerely,

Reena Oza
Public Health Nutrition
Graduate Student
865/692-5409; roza@utk.edu

Betsy Haughton, EdD, RD,LDN
Associate Professor
Director, Public Health Nutrition
865/974-6267; haughton@utk.edu

YOUR INPUT IS NEEDED!!!!

A questionnaire about multicultural nutrition counseling competencies was mailed to you a few weeks ago. We are interested in your participation because your input will help us understand competencies relevant to dietitians in the next ten years.

If you have already completed and returned the questionnaire, please accept our sincere thanks. If not, please do so today. It is important that your input be included in this study so that the results will accurately represent dietetic professionals of various backgrounds and experiences.

If you did not receive the questionnaire or it is misplaced, please call or e-mail me (Reena: 865-692-5409, roza@utk.edu) and I will send another one immediately.

Sincerely,

Reena Oza
Public Health Nutrition
Graduate Student

Betsy Haughton EdD, RD, LDN
The University of Tennessee

YOUR RESPONSE IS IMPORTANT!!!

Dear Nutrition Colleague:

We need your input! We have not received your responses to a questionnaire about multicultural nutrition counseling competence. Your input will help determine what multicultural nutrition counseling competencies are essential for Registered Dietitians in the next 10 years. As of September 13, 2002, we have not received either of two questionnaires that were mailed to you and we value your contributions to this research. So, we hope that you will complete the enclosed questionnaire right away.

You were randomly selected from Registered Dietitians belonging to the Commission on Dietetic Registration. Your responses are important and your participation is voluntary. You can withdraw at any time without penalty.

In case your questionnaire has been misplaced, we have enclosed another questionnaire and self-addressed stamped envelope. We ask that you follow the instructions carefully and please be candid when responding to questions. Your responses will be kept confidential and we will report group results. There are no foreseeable risks in completing the questionnaire. Neither individuals nor agencies will be identified and no reference will be made to data that could link you to the research study. The data will be stored securely and only the researchers will have access to a code that matches names of participants with numbers on the returned envelopes. Returned questionnaires will not be matched to the codes or names of participants. This will help us maintain confidentiality, yet permit follow-up of unanswered questionnaires. The personal inventory questions will be used for analytic purposes.

It is estimated that it will take you approximately 20-30 minutes to complete the questionnaire. After completing it, please return it in the enclosed self-addressed, stamped envelope.

We look forward to return of your completed questionnaire, which indicates informed consent as a participant in this study. We would appreciate receiving your completed questionnaire by October 4, 2002.

If you have any questions, you can contact us by phone or e-mail.

Sincerely,

Reena Oza
Public Health Nutrition
Graduate Student
865/692-5409; roza@utk.edu

Betsy Haughton, EdD, RD,LDN
Associate Professor
Director, Public Health Nutrition
865/974-6267; haughton@utk.edu

APPENDIX F

Validated Multicultural Nutrition Counseling Competencies

Factor 1: Cultural Encounter

1. Listen with empathy
2. Respect client's religious and/or spiritual beliefs and values, because they affect worldview, food and health practices
3. Believe that cultural differences do not have to negatively affect communication or counseling relationships
4. Accept and respect differences among cultural groups
5. Gain trust and respect of individuals who are culturally different from self
6. Be willing to build on the client's own problem-solving ability within his/her cultural context
7. Be open-minded and willing to be a learner instead of the expert when it comes to the client's life experiences and worldview
8. Value the client's right to evaluate nutrition counseling advice within his/her own cultural environment
9. Seek to minimize negative stereotypes
10. Recognize communication style differences and adapt own style to the client's modality

Factor 2: Culturally Appropriate Nutrition Intervention Skills

11. Use cultural knowledge and cultural sensitivity for appropriate nutrition interventions and strategies
12. Apply medical nutrition therapy strategies that are culturally appropriate
13. Apply nutrition-related health promotion/disease prevention strategies that are culturally appropriate
14. Develop and select culturally appropriate nutrition education and counseling materials

15. Receive and send verbal and nonverbal messages that are culturally appropriate for the client
16. Have general knowledge of cultural groups, their families and communities, values and beliefs, characteristics and resources
17. Demonstrate ability to adjust own counseling style to meet client's needs, values, and lifestyle
18. Differentiate between individual cultural differences and universal similarities

Factor 3: Multicultural Self-Awareness

19. Be aware and sensitive to own cultural heritage
20. Recognize limits of own cultural competencies and abilities
21. Recognize how own cultural background, experiences, attitudes, values, and biases influence nutrition counseling
22. Use own cultural heritage as a starting point to understand others who are culturally different
23. Recognize own stereotypes and preconceived notions that may affect interaction with other culturally different groups
24. Recognize how own racial and cultural heritage impacts personal and professional definition of normal and abnormal food practices
25. Be comfortable with differences that exist between self and culturally diverse clients

Factor 4: Awareness of Social/Cultural Determinants of Health

26. Seek to understand self as a racial and cultural being
27. Understand how societal conditions, such as oppression and stereotyping, affect one personally and professionally

28. Recognize that minority populations have to bridge at least two cultures and this status influences food practices
29. Contrast one's own beliefs and attitudes with those of culturally different clients in a nonjudgmental fashion
30. Value bilingualism of the counselor as an asset to counseling

Factor 5: Multicultural Knowledge of Food Practices

31. Have general knowledge of cultural eating patterns and family traditions
32. Understand food selection, preparation, and storage within a cultural context
33. Possess specific knowledge of cultural values, health beliefs, and nutrition practices of particular groups served, including culturally different clients
34. Familiarize self with relevant research and latest findings regarding nutrition-related health problems of various ethnic, racial, and other cultural groups
35. Have knowledge and understanding of differences within cultural groups and variations in food practices

Factor 6: Role of Culture in Communities and Agencies

36. Identify institutional or agency barriers that prevent some cultural groups from using nutrition and health services
37. Evaluate new techniques, research, and knowledge as to validity and applicability in working with culturally different populations
38. Demonstrate the generic characteristics of counseling and how they may clash with the cultural values of various minority groups
39. Advocate for reduction or removal of institutional or agency barriers that prevent some cultural groups from using nutrition and health services.

prevent some cultural groups from using nutrition and health services.
40. Work to learn about the unique characteristics, abilities, and knowledge of the culturally different client by working collectively with community leaders or members

Factors that did not load in the factor analysis

41. Take responsibility for explaining the nutrition counseling process to the client.
42. Demonstrate how things such as race, culture, and economics may affect not only food practices, but also nutrition-related health problems and the appropriateness of counseling approaches.
43. Identify additional resources (agencies, persons, informal helping networks, ethnic food stores, etc) that may be used by the client.
44. Seek consultation with traditional healers or religious and spiritual leaders/practitioners in the treatment of culturally different clients when appropriate
45. Modify the counseling process in response to listening to the client's worldview.
46. Empathize with other cultural worldviews.
47. Work with clients to maintain their traditional eating patterns to the extent possible and in relationship to available foods and health needs.
48. Be willing to take risks because they are necessary and important for personal and professional growth.
49. Respect the variety of helping practices that exist within cultures and community networks.
50. Tailor counseling to the client's cultural perspective.
51. Interact in the language requested by the client directly and, if not feasible, make appropriate referral.

52. Work with interpreters so translation is culturally appropriate and accurate.
53. Use nutrition, dietary, and counseling assessment instruments within the client's cultural context.
54. Counsel clients systematically.
55. Have skills in a language other than his/her own as appropriate for clients served.
56. Actively seek educational, consultative, research, and training experiences to improve understanding and effectiveness in working with culturally different populations.

VITA

Reena Bharat Oza was born in New York City, New York on August 31, 1977. She attended South Elementary and graduated from New Philadelphia High School in Ohio in 1995. She received a Bachelor of Science in Nutrition from The Ohio State University in June 1999. In May of 2003, she received a Master of Science in Public Health Nutrition and a Master of Public Health in Community Health Education from the University of Tennessee at Knoxville.